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ANNUAL REPORT

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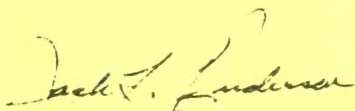
SUPERINTENDENT

YELLOWSTONE NATIONAL PARK

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9938

Submitted by:



Jack K. Anderson
Superintendent

January 15, 1972

[151973]

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I. ADMINISTRATION

A. Personnel

During 1972, 81 people received training in a wide and varied number of courses including Labor Relations; Law Enforcement, Pollution Abatement; Mid-Management Institute; Operations and Maintenance; Supervisory Safety Courses; Communications; Scuba Diving, Avalanche Training - Rescue; Survival Training; Fire Training; Blasting Explosives; numerous Administrative training courses. The above titles reflect only part of the courses that were involved. Those individuals taking part in training ranged from the lower WS schedules through GS-14 level.

B. Awards

Awards were presented to eight employees in both wageboard and general schedule categories which included both special achievement and quality increases. (See Appendix I for complete breakdown.)

C. Union Management

Yellowstone has had excellent union management relations working under basic and supplemental agreements during the past year and half. The Union is represented on the Quarters Committee, Safety Committee, and the Management Operations Committee. During this year there were three meetings of the Union and the Superintendent. There were no grievances or appeals during this time.

D. Budget and Finance

(See Appendix II for approved copies of final operating program.)

E. Concessions

The following concessions were in full operation during 1972 in Yellowstone: Yellowstone Park Company, Hamilton Stores, Incorporated, Yellowstone Park Service Stations, Yellowstone National Park Medical Service, Mountain States Telephone, and Montana Power Company.

E. Concessions (Continued)

During the period of the Second World Conference all concessioners provided exceptional service beyond the requirements of their contracts. This is particularly true of the Yellowstone Park Company and the Yellowstone National Park Medical Service.

The Yellowstone Park Company's contract (effective October 1, 1966 - September 30, 1996) provides overnight accommodations, eating establishments, transportation (bus and snowcoach tours) and horse operations.

Hamilton Stores, Incorporated has a contract effective October 1, 1969 - September 30, 1999, providing general stores, grocery stores and curio shops.

Together these two corporations, through a joint venture agreement, effective October 1, 1967 - September 30, 1974, operate the Yellowstone Park Service Stations.

Yellowstone Park Company and Hamilton Stores, Inc., also operate Grant Village Docking facilities, Bridge Bay Docks and Boat Repair Building. These memorandums of agreement are effective January 1, 1971, and continue "for the period of time specified in the basic contract". Facilities and services include boat and motor rentals, docking rentals, sightseeing tours, gas, oil and accessories, guide service, ice vending, boat hoist, boats with fishing tackle and dry ice.

Facilities and services under the management of Fishing Bridge Trailer Village, owned by the Yellowstone Park Company, consist of trailer sites with sewer, water and power hookups, shower and laundry facilities, and comfort stations. The operation is authorized under a memorandum of agreement, also extending from January 1, 1971, for the period of time specified in the basic contract.

A new medical service contract, extending from April 1, 1972 - March 31, 1976, was signed with the Yellowstone National Park Medical Service. Insurance rates for seasonal employees rose to 35¢ per day. The supplemental Medical and Hospital Plan for permanent employees increased rates to 13¢ a day for single

E. Concessions (Continued)

employee, 16¢ for a couple, and 18¢ for a family.

A concession permit (from December 1, 1972 - April 30, 1975) was granted Jack Pine Ski Shop, doing business as "Quiet Country Ski Tours", authorizing rental of skis and snowshoes, as well as to conduct tours in the Old Faithful area.

Some thought has been given to bicycle rental, however, until safety problems of mixing bicycles, automobiles and pedestrians can be resolved this has been held in abeyance.

For the first time in the history of Yellowstone, overnight accommodations are available at Old Faithful for winter visitors. There were 3,411 overnight guests at the Snow Lodge from January to April 1972. Snow Lodge is operated by the Yellowstone Park Company.

In 1972, Hamilton Stores were required to relocate two buildings at Old Faithful because of new road locations.

The Yellowstone Park Company, in an effort to improve visitor service renovated the Lake Lodge which included carpeting and the installation of a new food serving system known as the "scramble system". This was also installed at the Old Faithful cafeteria. This alleviated long lines of visitors waiting for service.

II. INTERPRETATION AND RESOURCES MANAGEMENT

A. Interpretive Program

1. Centennial

As with all other divisions in Yellowstone this year, activities centered around the Centennial, with the highlight being the Second World Conference on National Parks. The Centennial culminated several years of planning and preparation with several new interpretive facilities being dedicated and opened to the public. These new facilities included a braille trail called, "The Three Senses Nature Trail", dedicated on July 7, 1972; the Explorers Museum dedicated on July 28, 1972; and the new Old Faithful Visitor Center dedicated on June 24, 1972. (Photographs follow this report.)

A total of 27 seasonal interpreters were retained on duty through the Second World Conference and all seven of the park's museums and visitor centers were kept open for the Conference. Other major areas of involvement for the Interpretive Division during the Conference were providing several special evening programs; conducting foreign delegates on an all-day bus tour of Yellowstone; assigning interpreters to buses moving delegates around the park and to Grand Teton; leading special conducted walks in the Old Faithful area; manning information desks in airports and hotel lobbies; and assisting at special programs and handling special parties.

2. General Interpretation

Some of our most successful activities this year were twilight walks and interpretive demonstrations to include fly fishing, backpacking and photography. Additional early evening activities are planned for next summer as staffing permits.

It is estimated that at least 350,000 visitors viewed the geyser film in the three theaters in the Old Faithful Visitor Center complex.

II. INTERPRETATION AND RESOURCES MANAGEMENT (Continued)

A. Interpretive Program

2. General Interpretation (Continued)

Through November 1972, 63.2% of the visitors entering the park entered the visitor centers; 6.4% attended campfire programs; 3.2% attended nature walks; 21.3% attended audio-visual programs; 14.2% used self-guiding trails.

Thirty AM roadside radio transmitters were in operation during the past summer. The new transmitters obtained from INFO Systems, Inc., are superior to other models used. Visitor response to and use of the transmitters is excellent and we hope to have additional units in operation by next summer. There are some problems with FCC which are still unresolved and it is possible that we might have to terminate the entire project.

3. Special Interpretation

Environmental Programs for Young Children: For the past three years we have conducted special environmental programs directed at young visitors, aged 7 - 12, in several of our campground amphitheaters. The hour-long programs are held each morning and are conducted by a park naturalist and often a VIP assistant. The program in the form of a short walk followed by a discussion period, is designed to make the youngsters more aware of their natural surroundings and to give them a chance to touch, taste, smell, see and hear natural phenomena that they had not been aware of before. They are led beyond the sensory experiences to an appreciation of the inter-relationships among living things, especially between people and the components of their surroundings. This past summer the schedule was expanded to include an offering of 28 programs per week held in four amphitheaters throughout the park. More than 2300 youngsters attended the programs.

II. INTERPRETATION AND RESOURCES MANAGEMENT (Continued)

A. Interpretive Program

3. Special Interpretation (Continued)

Seminars

A new interpretive program, Yellowstone Forum, was presented at the Old Faithful Visitor Center this summer. Using a seminar approach, two ranger naturalists presented the environmental management policies and programs of Yellowstone to the park visitor. Primary emphasis was directed toward Yellowstone's bear, fish and fire management.

To increase area knowledge for local seasonal employees, seminar training sessions were offered to members of the maintenance, ranger, and naturalist divisions at Old Faithful. Seven such seminars were conducted with guest speakers including Ron Hart, Marler, Brock, Mitchell and Robertson - all experts in their fields.

4. Yellowstone Library and Museum Association

1972 was the most successful year this Association has ever experienced. Sales increased 44.98% with total sales of \$156,162. 530,448 self-guiding leaflets were distributed and 600,000 copies of the interpretive program, "Explore Yellowstone" were given to visitors as they entered the park. The following books were either published, co-published or assisted by the Association during the year: "Yellowstone, A Century of the Wilderness Idea" by Sutton, "Exploring Yellowstone" by Kirk, "Yellowstone - An Overview" by Sacks and Dunmire, "Geologic Story of Yellowstone" USGS, Keefer, and "Yellowstone Wildlife" by Perry.

II. INTERPRETATION AND RESOURCES MANAGEMENT (Continued)

B. Resources Management

Weather conditions during the early months of 1972 were characterized by strong and prolonged winds, temperatures slightly warmer than normal, and moisture in the form of snow running up to 145 % of normal. Cooler temperatures than normal during the spring delayed the spring melt, and slowed the opening of roads for conventional vehicle traffic. May and June were relatively free of moisture and the start of vegetative growth was correspondingly slight. Rains in July and August provided good growing conditions and green plant material was conspicuously visible during September and even into October. Temperatures during the balance of the year were cooler than normal with a particularly severe cold period occurring during the first two weeks of December.

The Draft Environmental Statements for the Wilderness Proposal and the Master Plan were completed and made available for public review on February 7.

The Wilderness and Master Plan public hearings were held in Jackson, Wyoming on March 11; Idaho Falls, Idaho on March 13; and Livingston, Montana on March 15.

The final Wilderness Proposal was sent to Congress on September 21, 1972. The final Wilderness Environmental Statement was completed in this office and sent to Midwest Region on December 1. As of this writing, we have not yet received notice that the Statement has been sent to Washington.

This spring, back-country campsites were designated parkwide, were posted on the ground, and use limits were established. The Back-country Use Permit (started in 1971) was continued this year and central monitoring of back-country use was begun this year in the Communications Center.

One visitor fatality occurred in June from an attack by a grizzly bear that had been attracted to a dirty, illegal campsite in the Old Faithful area. Another attack occurred in Fawn Pass, but after relatively minor injuries, the hiker

II. INTERPRETATION AND RESOURCES MANAGEMENT (continued)

B. Resources Management (Continued)

involved beat off the attacking grizzly with a hatchet. The third grizzly injury, a minor bite through a tent, occurred in Bridge Bay campground. Five minor injuries, all roadside, occurred from black bears this year. A summary of bear management activities is included in the Annual Report of Bear Management Activities submitted in December 1972.

Changes in fishing regulations proposed for 1973 include a required non-fee permit; closure of the Fishing Bridge area to fishing; catch-and-release fishing on open portions of the Yellowstone River above the falls, Slough Creek and the Lewis River; and a parkwide limit of two fish, except for certain brook trout waters in the northern part of the park where five fish may be kept. The proposed regulations have yet to be approved by the Washington Office.

For the first time since 1961, the fall population of elk in the northern herd exceeded 10,000. A special hunt, to take from 800 to 2,500 elk, has been set by the State of Montana for the Gardiner area north of the park, but the hunt is contingent upon sufficient elk leaving the park prior to February 1.

A new policy of allowing lightning fires to burn within two defined areas in the park totaling 340,000 acres was initiated. One such fire burned for four days and consumed less than .1 acre before going out.

The 1972 forest fire season was comparatively light with only 17 fires reported, and a total burn acreage of about 2 acres.

Active participation, in cooperative operation with the U. S. Forest Service, resulted in another successful season for the West Yellowstone Interagency Fire Control Center. One of two helicopters, contracted by Yellowstone for administrative and emergency use, was based at the Fire Control Center and utilized primarily for fire control activities.

II. INTERPRETATION AND RESOURCES MANAGEMENT (Continued)

B. Resources Management (Continued)

Seven structural fires occurred with a monetary loss of \$1,074. None of these fires occurred in a National Park Service facility.

Training activities for 22 seasonal fire management employees stressed safety in fire control, both structural and wildfire, helicopter operations, and search and rescue.

The White Pine Blister Rust Control activities involved continuation of Blister Rust Control evaluation studies and the pruning project in the Mammoth area. The evaluation studies, using paired plots for comparison appear to indicate that the control work was effective as a means of preventing inception of Blister Rust. The pruning conducted in the Mammoth area was performed as a protection measure for the relic Limber Pine stand in that area. Work is progressing well.

The Soil and Moisture program included the spraying of Dalmation Toadflax along the Gardner River. Effectiveness was evident because of a reduction in plants in the spray area. A Toadflax survey was conducted and a total of 2,744 acres of varying densities now exist in the Mammoth area. The removal and restoration of the site of an isolated obsolete elk trap on Little Buffalo Creek completed the regular summer season.

A survey was conducted in the southern and western portion of the park to determine insect and disease conditions and the timber stocking of our public use areas. A survey of the Mountain Pine Beetle infestation in the southwest corner of the park was conducted in mid-October to monitor the spread and intensity. Conclusions were that infestations were declining in the southwest corner, that the Madison-Pitchstone Plateau are stabilizing and that infestation is intensifying and spreading to the north and east into the West Yellowstone and Lake area. Evidence of Mountain Pine Beetle has been found as far north as Canyon and Indian Creek.

II. INTERPRETATION AND RESOURCES MANAGEMENT (continued)

C. Visitor Protection and Management

The Headquarters fire cache was converted to full emergency capability. We now have initial attack equipment for all emergencies, and all equipment can be air dropped.

1972 was the first full year of operation for our Central Communications Center. Overall it has functioned well and provided great assistance to management and field personnel. Hours of operation included twelve hours per day during the winter months, and up to twenty-four hours per day during the peak visitor use period.

The entrance stations began collecting fees later than May 1, because Craig Pass and Dunraven Pass were still closed with snow. An annual permit did not become available until late June. At the same time, a Golden Age Parklands Passport was authorized to be given free of charge to persons 62 and older. Entrance permit sales were made as follows:

Short Term Permits	\$774,684.50
National Parklands Passports	<u>218,060.00</u>
Total	\$992,744.50

In addition, 1,938 Golden Age Passports were issued by the Mammoth Sub-District and 595 were issued by the Visitor Use Office -- 2,533 total.

The collection of campground fees was on a voluntary basis, or honor system, with pipe-like depositories located at each campground. Using this system, \$207,053.52 was collected. Complaints from visitors have been fewer than they were last year, when the fees had to be paid in person. The convenience to the visitor also increased the percent who paid by 15 - 20%. It is planned to continue the system in 1973.

Winter visitation, consisting primarily of persons entering the park via oversnow vehicle, totaled 26,188 persons. This total reflects an increase of nearly 33 percent over the previous year, and is consistent with the annual winter use

II. INTERPRETATION AND RESOURCES MANAGEMENT (Continued)

C. Visitor Protection and Management (Continued)

increase for each of the past five years. Monetary resources to properly manage this winter activity are woefully inadequate, and the potential hazard to humans and the wilderness environment is great.

D. Law Enforcement

The general crime picture has not changed much in the past year. The most common crime, other than traffic violations, is thefts from parked autos and from campsites in developed campgrounds. The days when you could leave your camp unattended for hours or even days without problems are gone forever, it would seem. Narcotics are still a problem but it does not appear to have increased, although the problem is hard to work due to the lack of undercover operations and the relatively long time span necessary to perform conclusive investigative work. It is believed increasing numbers of the younger visitors are users of narcotics, to some extent, but knowledge of this usually occurs after the fact. Most of the apparent problem is with the concessioner's temporary employees and the "local population" from gateway towns.

In Yellowstone, 1972 was the first year for the use of the Service-wide citations-bond system. With the new system, the number of persons issued citations and bonded increased from 500 in 1971 to over 800 in the year just passed. This does not necessarily mean there were more offenses but the less complex system for the field man allowed him to issue citations where a warning would have been given in the past, i.e. at night, in the back country, etc. This is good in some cases but it might mean that citations were issued on a weak case simply because it was easy to do so. This subject will be thoroughly reviewed with all field Rangers in the next few months.

Due to the distance from the District Court, the Law Enforcement Office has acted as clerk for the processing of the citations, an activity which has increased the work load approximately three man-days per week.

II. INTERPRETATION AND RESOURCES ~~PLACE~~ continued)

D. Law Enforcement (Continued)

Much of the law enforcement skills training was done on a sub-district level, with specialized help from the training specialist in the Law Enforcement Office. This included firearms training, basic skills and moral and legal responsibilities. Thirty man-days of instructor time was spent and approximately 150 man-days of student time. In addition to this two Rangers attended the Basic Police School in WASO, the Law Enforcement Officer attended the Civil Disturbance Indoctrination School, Fort Gordon, Georgia, and one Ranger attended the Advanced Police School at the Montana Law Enforcement Academy. The FBI presented a total of five days of instructions on various subjects throughout the year.

A situation which is involving more and more law enforcement time is the recovery of stolen cars and the apprehension of the persons involved. This has come about due to the timely availability of information through the National Crime Information Center Service.

The portions of the Second World Conference on National Parks held here and the rededication of Yellowstone National Park were very successful, both generally and from a law enforcement standpoint. The time of the year when these events were held helped to lessen the problem. This doesn't detract from the excellent job by all involved. This is impressive considering the amount of and diversity of the people involved, i.e. the 50 Rangers from other National Park Service areas, the Secret Service, the Department of the Interior Security Force, and the U. S. Park Police. There were many problems of a normal nature for events of this type but all were handled without an over abundance of red tape. The events were well planned, and even more important flexible. This was demonstrated when Mrs. Nixon visited with only five day advance notice.

III. MAINTENANCE

A. Buildings, Grounds and Utilities

A major renovation of the Headquarter's Administration Building was completed. Forty-seven buildings received exterior painting and 26 others had major rehabilitation.

The regional tree transplanter worked in the Old Faithful area placing approximately 75 trees.

The Mammoth water supply intake on Glen Creek was rebuilt after substantial flood damage. AM radio installations for the park interpretive-information radio net was completed.

B. Roads and Trails

Park crews chip sealed 26.4 miles of road and put down an overlay bituminous surface on 14.8 miles of road. A wintertime snow surface maintenance program was begun last winter to keep the unplowed roads in shape for oversnow vehicle travel.

Fifteen miles of the Beartooth Highway were repaved.

The Bridge at Big Hole National Battlefield was reconstructed.

A "Three Senses" nature trail with Braille interpretive signs for blind visitors was constructed and opened last summer.

Uncle Tom's Trail in the Canyon Area was reconstructed and additional overlooks built.

C. Sign Program

The Old Faithful and Lake Bypass areas were resigned. A standard system of snowmobile signing was adopted.

On a pilot basis, selected trails in the Old Faithful area were signed for bicycle travel.

D. Temporary Construction

Maintenance crews participated in the National Park Service Centennial activities by enlarging the Madison Amphitheater, constructing speakers' platforms and other structures, meeting special power and electronic requirements and keeping park facilities at a high standard of appearance during the period.

IV. RESEARCH

Yellowstone National Park is administered as a natural area. The objective in such areas is to preserve natural environments and native biota as integrated wholes (i.e., ecosystems) for their scenic, educational, cultural and scientific values. This preservation of nature for esthetic and scientific reasons is aided by research which (1) produces basic reference information on the park environment, its biota and natural ecological relationships; (2) identifies and determines the causes of problems (i.e., departures from natural); and (3) measures the results of management actions taken to protect park values or correct problems.

Research is carried out in Yellowstone Park by four Park Service and two Bureau of Sport Fisheries and Wildlife biologists on a full-time basis, and by 30 to 40 researchers from other agencies or universities on a seasonal basis. This research ranges from basic studies on the park's geology, plant and animal life to applied evaluations of management. The working documents for this research program are available from the Superintendent of Yellowstone Park. Research publications and other related material may be obtained from the Biologists' office in Yellowstone Park.

V. OTHER

A. Special Events

March 1 - First Day of Issue Ceremony for Centennial Stamp
Yellowstone National Park Post Office

April 15 - Art display of paintings and photographs furnished
by local artists of the park and the gateway
communities. This will be a continuing program.

April 30 - Rededication of "USS YELLOWSTONE", Charleston,
South Carolina

June 1' and 18 - Centennial program in Gardiner, Montana
(a gateway community)

June 24 - Dedication of Old Faithful Visitor Center

July 7 - Dedication of "Three Senses Nature Trail"

July 23 - Formal opening of Explorers Museum at Madison
Junction

August 15 - Welcome of 50 millionth visitor to Yellowstone
National Park

September 16-17 - Reunion of former Yellowstone employees

September 19 - Rededication of the Second Hundred Years,
Madison Junction

September 19-21 - Second World Conference

B. Public Relations

Public appearances were made by members of the staff in
Yellowstone on 158 occasions inside the park and 37 outside
the park. A total of 8,622 persons were in attendance. The
Second World Conference hosted 1,250 delegates from 91 for-
eign countries. Special talks and opening speeches were
delivered by the park staff during this time.

A total of 965 special visitors were given VIP treatment by
two seasonal rangers. They provided transportation and con-
ducted tours and interpretation service as required.

B. Public Relations (Continued)

Special visitors included the First Lady and Secretary of the Interior during the Second World Conference in September. There were many other special dignitaries who visited the park, including a visit in March by Secretary of the Interior Morton to observe the winter operation and a visit by Assistant Secretary of the Interior Nat Reed in May. National Park Service Director Hartzog visited the park during the Second World Conference. Newscaster Lowell Thomas spent one day in the park in October.

There were approximately 51,200 informational packets sent to the public in 1972.

C. Volunteers-in-Parks

This program was very successful this year with 107 active volunteers including park and concessioner employees as well as the wives of park employees. These volunteers contributed over 5,000 hours. Considering the added demands for Centennial activities, we would literally have been swamped had it not been for the generosity of the people contributing their time. Volunteers worked on information desks, assisted with nature walks, campfire programs, creel census, backcountry patrol, collected biological information, served as hostesses and aides at dedication ceremonies, were drivers for dignitaries during the Centennial, manned information and assistance desks at airports and hotels, assembled and mailed Centennial literature and numerous other important tasks.

D. Cooperation with Other Agencies

Constant liaison has been maintained by the Office of the Superintendent with all other federal, state and local inter-related agencies. A new state program, "Keep Montana Beautiful", an environmental group, was initiated by Governor Anderson. Yellowstone National Park was asked to serve on the Steering Committee. An additional state program in Wyoming was initiated by Governor Hathaway entitled "REACT" with participation by both Yellowstone and Grand Teton National Parks.

D. Cooperation with Other Agencies (continued)

The U.S. Forest Service and Park Service have coordination meetings twice a year, in the fall and in the winter, which include representatives of the Regional Foresters and Forest Supervisors of the surrounding forests together with the Superintendents of Yellowstone and Grand Teton.

E. Accomplishment of Park Goals

Well thought out goals for Yellowstone and Big Hole National Battlefield were prepared for the 1973 fiscal year at the divisional level. These documented goals have served to "stretch" us out. Since they are ambitious and since so much time has been devoted specifically to the Centennial year activities, we are behind on some goals, ahead on others and hampered on some by fiscal and personnel restraints. However, on the whole it can be said we are nearly on target for Yellowstone. Progress was hampered at Big Hole Battlefield by the retirement of the Management Assistant in October.

We believe that the goal's program on an individual as well as park-wide basis serves a very useful purpose in identifying many elements not specifically thought of in the ^{work} program that need special attention during the year.

F. Landmark Inspections

Lola Trail Head, Bannack, Montana
Pompey's Pillar, Montana
Indian Caves, Montana

G. Legislative Program

Quit claim deed transferring mineral rights from Burlington-Northern to National Park Service, September 19, 1972

Transfer of the Grant Kohrs Ranch from the National Park Foundation to National Park Service

Acquisition of 120 acres to be added to Big Hole National Battlefield

H. Safety

Yellowstone has carried on a vigorous safety program in order to zero in on safety. The park began by organizing safety committees in the districts as well as the management committee, which proved to be very effective in that everyone was involved with safety.

Also, developed during the year was a Potential Hazard report. Anytime a hazard was noted, a report was filled out, given to the district safety committee and corrected at that level. If the hazard could not be corrected, the management committee assigned priorities and follow-up to insure corrective action was taken as time, funds and personnel became available.

An intensive inspection study was made on buildings. Priorities and follow-up on work orders were made to correct fire hazards. This program was effective in eliminating many long-lived fire hazards.

During the year, various types of equipment were tested for noise exposure. Those employees working on or near equipment with high noise levels were provided with ear protection. All employees are provided with protective equipment and clothing in activities requiring protection, such as safety glasses, snowmobile helmets and suits. Safety devices have been installed on equipment with poor backing visibility such as backup alarms, slow moving emblems, amber warning lights and convex mirrors. The park has provided several courses in first-aid and driver improvement with quite a number of trained employees. Also, being offered this year is a course in snowmobile operation and safety. It is hoped that all employees will have had these courses within the next year.

The park safety program has been successful this year in that it has shown the employees that management is concerned and is making every effort to correct any deficiencies.

A comparison of the accidents for the last two years are as follows:

	1971	1972
Visitor Motor Vehicle Accidents	544	481
Visitor Injuries	132	110
Fatalities	5	5

H. Safety (Continued)

	<u>1971</u>	<u>1972</u>
Employee Motor Vehicle Accidents	34	35
Employee Lost Time Accidents	6	9
Non-Disabling Injuries	44	48

From May 13-17 and July 7-10, representatives of the National Safety Council visited Yellowstone to study all aspects of our safety program and problems, as one of 10 areas selected by the Service to provide a cross-section of safety problems within the National Park Service. To date, no report has been received from the National Safety Council concerning the visit to Yellowstone.

I. Status of Planning

The Master Plan is in its final stage to be submitted to the Director for his approval. The Wilderness Proposal has been submitted to Congress.

J. Advisory Boards and Commissions

Ex-officio member of the National Parks Centennial Advisory Committee -- Jack K. Anderson, Superintendent

An advisory committee of the Conservation Foundation visited Yellowstone National Park in January in preparation for the Yosemite Symposium which led to the "National Parks for the Future" report which was presented during the opening ceremonies of the Second World Conference in Yellowstone.

K. Operations Evaluation

An operations evaluation was made in Yellowstone in June, 1972 by Midwest Regional Office Evaluation Team. The team noted that the area had complied with all the recommendations from the previous evaluation report that were possible for the park to implement. All recommendations from the current report have been considered and acted upon where appropriate. A follow-up report will be made to the Region at the end of January, 1973. The following excerpt from the report is worthy of note:

K. Operations Evaluation (Continued)

"A rather general, somewhat distorted, idea has existed throughout the Service concerning the amount of the budget at Yellowstone. The truth of the matter is that Yellowstone, like many other Midwest Region areas, lacks the manpower and money resources to conduct all of its operations in accordance with park activity standards."

The report resulted in our reevaluation of several aspects of the operation.

L. Christian Ministry

The Christian Ministry program in Yellowstone had another active and very successful year with 40 Christian Ministry students assigned to the park during the summer months. A very successful, national, annual meeting was held in Yellowstone in September in connection with the Yellowstone Centennial. It was dampened only by the very serious injury Warren Ost received and the ultimate death of a Yellowstone Christian Ministry student, Dick Wright, Jr., in an automobile accident between Yellowstone and Cody just prior to the annual meeting. A festival service of Thanksgiving for the National Park Idea was held at the Mammoth Chapel on September 11, 1972. Attendance at Christian Ministry services in Yellowstone during 1972 totaled approximately 20,000.

M. Big Hole National Battlefield

Big Hole National Battlefield was expanded by the purchase of 120 acres to include the Nez Perce campsite in December of 1971.

All facilities in the Battlefield are new including the visitor center, maintenance accommodation complex and residences. Principal work to be accomplished is the Battlefield site. This involves rather extensive trail work, sign work and obliteration of an old road which leads from the terminal parking area to the Battlefield site.

M. Big Hole National Battlefield (Continued)

Within the past three years, the area has become extremely popular and has continued to experience a growth in visitation.

The Management Assistant in charge of the area, David Stimson, retired in late October, after 35 years of civilian government service. The position has not been filled. It is currently being managed by a seasonal historian. This area requires additional permanent staffing which should be programmed at the earliest possible date.

During the late evening of September 6 or early morning of September 7, the visitor center was burglarized, a glass case broken and Chief Joseph's peace pipe, pipe stem and pipe case were removed. These items were on an indefinite loan basis from the Washington State University Museum and were a part of the L. V. McWhorter collection. The FBI is investigating the theft, however, as yet there has been no trace of the stolen items.

An operations evaluation was conducted at Big Hole National Battlefield in August, 1972, by one member of the Operations Evaluation Team. All of the recommendations have been evaluated, some have been acted upon, some will be initiated upon arrival of the new Management Assistant and others are planned for accomplishment in the spring or after the weather breaks.

N. Grant Kohrs Ranch

Public Law 92-406, establishing the Grant Kohrs Historic Site, was signed by the President on August 25, 1972. Preceding that time, property was held in trust by the National Park Foundation who had purchased 130 acres in fee and 1,100 acres in scenic easement, along with the present buildings, from Mr. and Mrs. Conrad K. Warren. In addition, Mr. and Mrs. Warren have donated many artifacts, including furnishings and farm equipment valued in excess of \$100,000. Grant Kohrs Ranch is located immediately northwest of Deer Lodge, Montana.

N. Grant Kohrs Ranch (Continued)

Development plans have been initiated and will continue to be worked on during the coming fiscal year. Currently, administration and protection of the area is the responsibility of the Superintendent, Yellowstone. One man, in a technician position, lives on site for protection and maintenance purposes. Funding for this has been "borrowed" from the Yellowstone program allotment.

All buildings on the ranch included in the purchase are in relatively good condition. All of the historical furnishings have been stored and covered for protection until such time as the ranch can become operational.

Proposed budget for 1974 fiscal year has been submitted in addition to a contingency minimal program which would only give security in the event appropriated funds are not forthcoming.

The City of Deer Lodge has agreed to donate approximately 20 acres of city property to the National Park Service if a picnic area is developed on the property. However, no action has been taken pending final decision on access to the property.

Photographs of the area follow.

A P P E N D I X I

A W A R D S P R E S E N T A T I O N

Yellowstone National Park, Wyoming
December 20, 1972

EMPLOYEE	GRADE	TITLE	TYPE OF AWARD	AMOUNT OF AWARD	NOMINATED	AWARDED
William E. Hape	GS-12	Maintenance Supervisor	Special Achievement	\$300	01-04-72	February 1972
Linda L. Criger	GS-06	Secretary (Steno)	Special Achievement	\$200	01-28-72	February 1972
Donald L. McCann	GS-09	Engineering Technician	Special Achievement	\$250	02-09-72	March 1972
Janie M. Douglas	GS-04	Clerk-Steno	Special Achievement	\$150	05-09-72	June 1972
Berrett W. Welker	WS-10	Maintenance Foreman	Special Achievement	\$200	06-26-72	07-14-72
Margaret B. Dupaix	GS-5/6	Secretary (Steno)	Quality Increase	GS-5/7	08-22-72	10-01-72
Stanley G. Canter	GS-12/5	Assistant Chief Park Naturalist	Quality Increase	GS-12/6	08-28-72	10-01-72
Elaine D' Amico	GS-3/2	Clerk-Typist	Special Achievement	\$300	09-12-72	November 1972
John E. O'Dea	GS-07	Park Ranger (Gen)	Special Achievement	\$300	10-03-72	10-19-72

YELLOWSTONE NATIONAL PARK

Financial Plan - Operating Program

Fiscal Year 1973

FINANCIAL PLAN - OPERATING PROGRAM

AREA OR OFFICE Yellowstone National Park	FINANCE OFFICE Midwest Region	FISCAL YEAR 1973
APPROPRIATION SYMBOL AND TITLE 1431033 Management and Protection	ACTIVITY OR SUBACTIVITY Management of Park & other areas	ACCOUNT NO.

COMPONENTS OF COST BY OBJECT CLASSIFICATION	ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN
11 & 12 - Personnel Compensation and Benefits (From Form 10-561a)	1,492,220		
21 - Travel and Transportation of Persons	34,800		
22 - Transportation of Things	10,550		
23 - Rent, Communications and Utilities (Includes GSA Office Space Rental \$)	57,703		
24 - Printing and Reproduction	10,144		
25.1 - Other Services (Itemize on reverse side)	62,470		
25.2 - Services of Other Agencies (Itemize on reverse side)	-		
26 - Supplies and Materials and Non-Capitalized Equipment (Direct Purchases)	55,827		
31 - Equipment (Capital Acquisitions - Itemize Below) See Attached _____ _____ _____	42,788		
32 - Lands and Structures			
41 - Grants, Subsidies, and Contributions			
42 - Insurance Claims and Indemnities			
61 - Depreciation of Equipment	2,939		
Equipment Operations	87,794		
Storehouse Operations	13,164		
62 - Corral Operations	17,135		
Shop Operations	12,266		
Manufacturing of Stores and Equipment			
63 - Utility Systems (NPS Operations Only)			
TOTAL AUTHORIZED PLAN	1,899,800		

DISTRIBUTION		EST. CUMULATIVE OBLIGATIONS BY APPORTIONMENT PERIOD (Quarterly or Triannual)			
NO.	TO	COMPONENTS	FIRST	SECOND	THIRD
		Personal services (11 & 12)	700,889	1,034,648	1,492,220
		All Other Expenses	127,352	236,507	364,792
		Capital Outlays (31)	12,050	39,290	42,788
		Total Authorized Plan	840,291	1,330,445	1,899,800

RECOMMENDED (SIR & Title)

(Date)

CONCURRED (SIR & Title)

(Date)

APPROVED (SIR & Title)

(Date)

ACTING

SUPERINTENDENT

431	2 - Electric Typewriter	\$ 1,000
	6 - Manual Typewriter	1,350
	Office Furniture	3,500
	Desktop Computer	8,000
	Vertical Sketcher	450
	FED Directors	1,500
	AM Radio Equip. & Tapes	7,100
	Vehicles	12,000
	Portable Radios	3,000
	2 - Snowmobiles	3,000
	Movies & Slides	688
	2 - Calculators	<u>1,200</u>
		-42,788

#25.1

Other Services

Xerox copy service	\$ 7,500
Maintenance of office equipment	1,500
Helicopter Rental	17,500
Fixed Wing Rental	7,000
Wester Union	250
U.S. Civil Service Commission	2,000
VIP Needs	2,000
Two graduate Studies	
2 @ \$3,000 (eagle & cutthroat taxonomy or grayling)	6,000
IBM service contract	290
Contract typing	1,000
Gallatin cooperative agreement YELL-N-3	4,000
Rental of GSA vehicle	2,500
Contract with seasonal personnel to present environmental programs in large cities throughout the country during the winter	7,500
Yellowstone Park Co. (collection of entrance fees)	700
Burrroughs service contract	600
Royal service contract	130
Contract processing bear carcasses (Montana Fish & Game)	2,000
	<hr/> 62,470

FINANCIAL PLAN - OPERATING PROGRAM

DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

NUMERICAL CODE 5001,

6864 & 6880

DATE

4-21-72

FISCAL YEAR

1973

AREA OR OFFICE		FINANCE OFFICE				ACCOUNT NUMBER	
Yellowstone National Park		Midwest Region				1973	
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR BUDGETARY FUNCTION				ACCOUNT NUMBER	
1431033 Management & Protection		Management of Park and other areas					
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN-YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
	Permanent full-time positions:						
6861-01	Park Manager (Anderson)	15/5	1		28,995		
6861-05	Park Manager (Haraden)	14/5	1		24,888		
6861-10	Park Manager (Hennesay)	13/5	1		21,237		
6861-11	Park Manager (Coleman)	13/3	1		19,987		
6861-15	Management Asst. (Budlong)	12/8	1		19,569		
6861-16	Maint. Supt. General (Miller)	12/1	1		15,866		
6861-17	Photographer (Keller)	11/3	1		14,197		
6861-20	Secretary (DeRossi)	7/5	1		10,261		
6861-25	Supv. Research Biologist (Cole)	14/5	1		24,888		
6861-30	Research Biologist (Barmore)	12/5	1		17,982		
6861-35	Research Biologist (Houston)	12/4	1		17,453		
6861-45	Research Biologist (Meagher)	11/3	1		14,197		
6861-47	Research Biologist (Despain)	11/2	1		13,753		
6861-50	Wildlife Research Clerk (Kurtz)	6/7	1		9,785		
6862-01	Administrative Officer (Hanner)	13/6	1		21,862		
6862-05	Personnel Officer (Miller)	12/8	1		19,569		
6862-21	Financial Program Specialist (Walisch)	11/6	1		15,529		
6862-28	Assist. Personnel Officer (Chamberlin)	10/4	1		13,366		
6862-33	Procurement Agent (Ludwig)	9/2	1		11,414		
6862-35	Supv. Supply Tech. (Wolfe)	7/6	1		10,563		
6862-41	General Supply Asst. (Atwood)	7/10	1		11,771		
6862-44	Office Services Supv. (Sena)	5/2	1		7,563		
6862-57	Secretary-Steno (Gwin)	5/5	1		8,295		
6862-61	Clerk (Anderson)	5/6	1		8,539		
6862-89	Clerk-Typing (Herne)	4/3	1		6,980		
6862-93	File Clerk (Thompson)	4/4	1		7,198		
6863-01	Supv. Park Ranger (Dunmire)	13/4	1		20,612		
6863-05	Supv. Park Ranger (Canter)	12/5	1		17,982		
6863-30	Secretary-Steno (Dupaix)	5/6	1		8,539		
6863-35	Supv. Park Ranger (Halladay)	11/1	1		13,309		
6863-40	Supv. Park Ranger (Stockert)	11/2	1		13,753		
6863-42	Park Ranger (Woody)	9/3	1		11,782		
6864-01	Supv. Park Ranger (Estey)	13/5	1		21,237		
6864-03	Supv. Park Ranger (Bucknall)	12/4	1		17,453		
6864-10	Supv. Park Ranger (Sellers)	12/5	1		17,982		
6864-20	Supv. Park Ranger (Phillips)	12/1	1		15,866		
6864-30	Supv. Park Ranger (Orgill)	9/4	1		12,150		
6864-35	Law Enforcement Spec. (Protto)	9/1	1		11,046		
6864-45	Supv. Park Ranger (Susong)	9/7	1		13,254		
6864-47	Supv. Park Ranger (Brady)	9/5	1		12,518		
6864-49	Supv. Park Ranger (Danforth)	9/5	1		12,518		
6864-50	Park Ranger (Hurd)	7/4	1		9,959		

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS
 NUMBER 6864 & 6880
 DATE 4-21-72
 FISCAL YEAR 1973
 ACCOUNT NUMBER

AREA OR OFFICE		FINANCE OFFICE				FISCAL YEAR	
Yellowstone National Park		Midwest Region				1973	
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY				ACCOUNT NUMBER	
1431033 Management and Protection		Management of Park and Other Areas					
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN- YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURREN PLAN
6864-51	Supv. Park Ranger (Fraser)	9/9	1		13,990		
6864-52	Park Ranger (Fox)	7/4	1		9,959		
6864-54	Park Technician (Rapiere)	7/2	1		9,355		
6864-59	Supv. Park Ranger (Miller)	9/2	1		11,414		
6864-60	Secretary-Steno (Criger)	6/5	1		9,241		
6864-66	Park Technician (Grossman)	7/3	1		9,657		
6864-72	Supv. Park Ranger (Williamson)	11/5	1		15,085		
6864-74	Supv. Park Ranger (Dodge)	9/5	1		12,518		
6864-76	Supv. Park Ranger (Hurt)	9/3	1		11,782		
6864-78	Supv. Park Ranger (Hays)	9/4	1		12,150		
6864-80	Supv. Park Ranger (Nash)	9/2	1		11,414		
6864-84	Supv. Park Ranger (Nuss)	11/8	1		16,417		
6864-86	Supv. Park Ranger (Griffiths)	9/4	1		12,150		
6864-88	Supv. Park Ranger (Mernin)	9/6	1		12,886		
6864-90	Supv. Park Ranger (Johnson)	9/3	1		11,782		
6864-96	Supv. Park Ranger (Nelson)	9/2	1		11,414		
6864-98	Supv. Park Ranger (Scott)	11/5	1		15,085		
80-17	Management Asst. (Stimson)	11/5	1		15,085		
	Total Permanent		60	60.0	847,051		
	Deduct lapses (8%)			-04.8	-66,558		
	Net Permanent			55.2	780,493		

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

6864 & 6880

6864 & 6880

DATE
4-21-72

AREA OR OFFICE		FINANCE OFFICE				FISCAL YEAR	
Yellowstone National Park		Midwest Region				1973	
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY				ACCOUNT NUMBER	
1431033 Management & Protection		Management of Park and Other Areas					
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN-YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
	Positions other than permanent:						
	Temporary full-time employment:						
	Management Assistant	11/10	1	0.5	5,083		
	Management Assistant	7/4	1	0.4	3,984		
	Dist. Supply Clerk	5/6	1	0.7	5,977		
	Personnel Clerk	5/5	1	0.9	7,661		
	Clerk (North)	5/5	1	0.1	958		
	Purchasing Agent	5/3	1	0.9	7,200		
	Dist. Supply Clerk	5/5	1	0.9	7,466		
	Clerk (West)	5/4	1	0.1	503		
	Secretary (Steno)	5/2	1	0.9	6,989		
	Clerk (South)	5/2	1	0.1	874		
	Clerk (Steno)	4/4	1	0.9	6,643		
	Clerk (Steno)	4/2	1	0.9	6,240		
	Clerk (Steno)	4/2	1	0.9	6,240		
	Personnel Clerk	4/3	1	0.9	6,451		
	Clerk (Steno)	5/2	1	0.9	6,989		
	Clerk	3/2	1	0.9	5,568		
	Clerk-Typist	3/1	1	0.9	5,376		
	Clerk-Typist	3/1	1	0.9	5,376		
	Clerk-Typist	3/1	1	0.9	5,376		
	Clerk-Typist	3/1	1	0.5	2,914		
	Clerk (Steno)	4/2	1	0.1	780		
	Clerk (Steno)	4/1	1	0.1	409		
	Clerk-Typist	3/1	1	0.1	364		
	Warehouseman	5/1	1	0.3	2,196		
	Clerk-Typist	3/1	1	0.4	2,331		
	Clerk-Typist	3/1	1	0.3	1,748		
	Clerk-Typist	3/1	1	0.3	1,748		
	Clerk-Typist	2/1	1	0.3	1,550		
	Program Clerk	5/1	1	0.9	6,758		
	Clerk-Typist	3/4	1	0.1	739		
	Oral Communications Specialist	11/1	1	0.3	3,327		
	Supv. Park Ranger (Naturalist)	7/10	1	0.2	1,700		
	Supv. Park Ranger (Naturalist)	7/2	2	0.5	4,677		
	Supv. Park Ranger (Naturalist)	7/1	2	0.5	4,526		
	Supv. Park Ranger (Naturalist)	6/5	1	0.3	2,772		
	Supv. Park Ranger (Naturalist)	6/2	1	0.3	2,106		
	Supv. Park Ranger (Naturalist)	6/1	4	1.0	8,153		
	Park Ranger (Naturalist)	5/1	24	8.5	62,283		
	Park Ranger (Naturalist)	4/1	12	4.5	29,448		
	Park Technician	5/1	1	0.9	6,587		
	Park Technician	4/1	1	0.5	3,272		
	Information Receptionist	4/1	1	0.3	1,637		

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

6864 & 6880

DATE

4-21-72

FISCAL YEAR

1973

AREA OR OFFICE		FINANCE OFFICE				ACCOUNT NUMBER	
Yellowstone National Park		Midwest Region					
APPROPRIATION SYMBOL AND TITLE		ACTIVITY SYMBOL AND TITLE					
1431033 Management and Protection		Management of Park and Other Areas					
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN- YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
	Information Receptionist	3/1	3	0.8	4,371		
	Clerk Typist	5/2	3	0.2	1,512		
	Typist	4/1	3	0.1	654		
	Typist	3/1	3	0.1	582		
	Park Technician	6/1	1	0.9	7,526		
	Supv. Telephone Operator	4/8	1	0.9	7,450		
	Telephone Operator	3/5	1	0.9	6,106		
	Clerk (Steno)	4/2	1	0.9	6,240		
	Clerk (Steno)	4/2	1	0.9	6,240		
	Clerk-Typist	4/4	1	0.9	6,643		
	Clerk-Typist	3/2	1	0.9	5,568		
	Park Technician	5/1	1	0.9	6,758		
	Clerk	5/2	1	0.2	1,398		
	Clerk	5/4	1	0.1	805		
	Clerk	5/4	1	0.2	1,486		
	Clerk	3/4	1	0.2	1,183		
	Clerk	4/2	1	0.2	1,248		
	Clerk	4/1	1	0.1	554		
	Clerk	3/1	1	0.1	342		
	Park Ranger	7/1	5	2.1	18,966		
	Park Ranger	6/1	9	3.1	25,402		
	Park Ranger	5/1	48	12.5	91,520		
	Park Ranger and/or Technician	4/1	20	8.0	52,668		
	Information Receptionist						
	Park Aid	3/1	6	2.3	13,440		
	Park Ranger Historian	5/1	1	0.2	1,464		
	Park Ranger	4/1	1	0.3	1,963		
	Subtotal		198	72.8	525,068		
	Intermittent Employment:						
	Telephone Operator	3/1	1	0.2	1,411		
	Telephone Operator	2/1	3	1.0	5,099		
	Subtotal		4	1.2	6,510		
	Total other than permanent		202	74.0	531,578		
	Other personnel compensation:						
	Overtime Pay				14,750		
	Holiday Pay				14,482		
	Night work differential				3,867		
	Sunday differential				21,931		
	Total other personnel compensation				55,030		
	Total personnel compensation				586,608		

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITSNUMERIC CODE 6861 -
6864 & 6880
DATE
4-21-72

AREA OR OFFICE		FINANCE OFFICE				FISCAL YEAR	
Yellowstone National Park		Midwest Region				1973	
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY				ACCOUNT NUMBER	
1431033 Management & Protection		Management of Park and Other Areas					
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN-YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
	<u>Add Personnel Benefits:</u>						
	(10% of above "net permanent")				78,050		
	(6% of above "other than permanent")				31,894		
	<u>Uniform Allowance:</u>						
	Permanent				4,925		
	Temporary				10,250		
	Total personnel benefits				125,119		
	Total personnel compensation and benefits (amount to be included on Form 10-561				1,492,220		
	<u>II. Informational entries for classified pay increases effective January 9, 1972, applicable to fiscal 1973 programs</u>						
	Permanent				45,230		
	Other than permanent				28,555		
					73,785		
	<u>Other personnel compensation:</u>						
	Overtime Pay				805		
	Holiday Pay				794		
	Differentials				1,415		
					3,014		
	<u>Related benefits:</u>						
	Permanent				4,064		
	Other than permanent				1,713		
					5,777		
	Total classified pay increase costs - (rounded)				82,500		

FINANCIAL PLAN - OPERATING PROGRAM

DETAIL BY COST FEATURE

6861-1000 5

DATE

4-21-72

FISCAL YEAR

1973

ACCOUNT NO.

FOR OFFICE		FINANCE OFFICE		
Yellowstone National Park		Midwest Region		
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY		
1431033 Management and Protection		Management of Park and Other Areas		
COST ACCOUNT NUMBER	COST FEATURE	ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN
6861-170	<u>General Management</u>			
6861-175	Management and Supervision	243,982		
6862-176	Administration	323,418		
6861-177	Biologists	141,600		
6863-150	<u>Interpretation</u>			
6863-151	Fee Collect	--		
6863-152	Information	51,000		
6863-153	Evening or Day Programs	1,000		
6863-154	Interpretive Stations	9,000		
6863-155	Conducted Trips	30,176		
6863-156	Off-Site Services	3,000		
6863-157	Environmental Education	9,000		
6863-158	Special Studies	5,000		
6863-159	Curatorial	9,000		
6863-160	Cooperating Associations	4,000		
6863-161	Training	7,000		
6863-162	Management & Supervision	133,000		
6863-163	Administration	5,000		
6864-100	<u>Visitor Protection and Resource Management</u>			
6864-101	Entrance Stations	70,143		
6864-104	Campgrounds	15,800		
6864-107	Winter Use	46,230		
6864-110	Road Patrol	91,824		
6864-111	Boat Patrol	14,500		
6864-116	Emergency Operations	13,000		
6864-120	Chief Park Ranger's Office	145,500		
6864-122	District and Sub-District Mgmt. and Supervision	272,900		
6864-123	Central Communications Center	43,000		
6864-131	Wildlife Management	46,127		
6864-133	Land Management (Wildland Fire, Vegetative, and Back Country Mgt.)	92,500		
6880-170	<u>General Management</u>			
6880-175	Management & Supervision	23,100		
	TOTAL AUTHORIZED PLAN	1,899,800		

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL BY COST FEATURE

6601-0001
DATE

AREA OR OFFICE		FINANCE OFFICE		FISCAL YEAR	
Yellowstone National Park		Midwest Region		1973	
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY		ACCOUNT NO	
1431033 Management and Protection		Management of Park & Other areas			
COST ACCOUNT NUMBER	COST FEATURE		ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN
	Perm. Pos.	M.Y. Other	Total Auth. Plan	Info. Entry Classified Increase (73)	Info. Entry for W.B. I
Yellowstone National Park	59	73.5	1,876,700	81,400	----
Big Holde National Battlfield	1	0.5	23,100	1,100	----
	60	74.0	1,899,800	82,500	-----

FINANCIAL PLAN - OPERATING PROGRAM

AREA OR OFFICE		FINANCE OFFICE		
Yellowstone National Park		Midwest Region		
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY		
1431033 Management & Protection		Forestry & Fire Control		
COMPONENTS OF COST BY OBJECT CLASSIFICATION		ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN
11 & 12 - Personnel Compensation and Benefits (From Form 10-561a)		80,907		
21 - Travel and Transportation of Persons		1,500		
22 - Transportation of Things				
23 - Rent, Communications, and Utilities (Includes GSA Office Space Rental \$)		4,380		
24 - Printing and Reproduction				
25.1 - Other Services (Itemize on reverse side)		12,843		
25.2 - Services of Other Agencies (Itemize on reverse side)				
26 - Supplies and Materials and Non-Capitalized Equipment (Direct Purchases)		4,187		
31 - Equipment (Capital Acquisitions - Itemize Below)				
32 - Lands and Structures				
41 - Grants, Subsidies, and Contributions				
42 - Insurance Claims and Indemnities				
61 - Depreciation of Equipment		140		
Equipment Operations		8,616		
Storehouse Operations		800		
62 - Corral Operations		6,023		
Sign Shop Operations		804		
Manufacturing of Stores and Equipment				
63 - Utility Systems (NPS Operations Only)				
TOTAL AUTHORIZED PLAN		120,200		

DISTRIBUTION		EST. CUMULATIVE OBLIGATIONS BY APPROPRIATION PERIOD				
NO.	TO	COMPONENTS	FIRST	SECOND	THIRD	FOUR
		Personal services (11 & 12)	47,552	57,754	80,007	
		All Other Expenses	15,736	24,704	39,222	
		Capital Outlays (31)				
		Total Authorized Plan	63,288	82,458	120,200	

RECOMMENDED (Sig. & Title) (Date) CONCURRED (Sig. & Title) (Date) APPROVED (Sig. & Title) (Date)

Harold J. G. T. 4-17-72
Chief Park Ranger ACTING Superintendent

Breakdown of item 25.1

Zerox rental \$ 1,000

Olympic Wing & Rotor
(helicopter contract) 7,500

West Yellowstone interagency
Fire Control Center 4,343

\$ 12,843

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

NUMERICAL INDEX 6864
DATE 04-17-72

AREA OR OFFICE		FINANCE OFFICE				FISCAL YEAR	
Yellowstone National Park		Midwest Region				1973	
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY				ACCOUNT NUMBER	
1431033 Management & Protection		Forestry & Fire Control					
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN- YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURREN PLAN
	Permanent Full-Time Positions:						
	(Gen.)						
6864 99	Fire Control Technician (Brown)	7/4	1	1	9,959		
6864 62	Fire Control Technician (Tracy)	7/7	1	1	10,865		
			2	2	20,824		

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

REFERENCE	886A
DATE	04-17-72
FISCAL YEAR	1973
ACCOUNT NUMBER	

AREA OR OFFICE		FINANCE OFFICE				FISCAL YEAR	
Yellowstone National Park		Midwest Region				1973	
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY				ACCOUNT NUMBER	
1431033 Management & Protection		Forestry & Fire Control					
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN- YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURREN PLAN
	Positions Other Than Permanent:						
	Temporary full-time employment:						
	Fire Protection Inspector (Rendo)	7/2	1	0.6	5,613		
	Supv. Fire Control Aid	5/1	1	0.5	3,660		
	Supv. Fire Control Aid	5/1	1	0.3	2,196		
	Fire Dispatcher	5/1	1	0.3	2,196		
	Fire Control Aid	4/1	14	4.2	27,485		
	Fire Control Aid (Lookouts)	3/1	3	0.9	5,245		
	Clerk-Stenographer	4/1	1	0.5	3,272		
	Total Other Than Permanent		22	7.3	49,667		
	Other Personnel Compensation:						
	Overtime Pay				351		
	Holiday Pay				1,447		
	Sunday Differential				3,088		
					4,886		
	Total Pers. Compensation				75,377		
	Add Personnel Benefits:						
	(10% of above "net permanent")				2,082		
	(6% of above "other than permanent")				2,980		
	Uniform Allowances:						
	Permanent				250		
	Other than permanent				218		
	Total Personnel Benefits				5,530		
	Total personnel compensation and benefits (amount to be included on Form 10-561)				80,907		

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

NUMERIC CODE
6861
DATE
04-17-72
FISCAL YEAR
1973
ACCOUNT NUMBER

AREA OR OFFICE	FINANCE OFFICE	FISCAL YEAR					
Yellowstone National Park	Midwest Region	1973					
APPROPRIATION SYMBOL AND TITLE	ACTIVITY OR SUBACTIVITY	ACCOUNT NUMBER					
1431033 Management & Protection	Forestry & Fire Control						
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN- YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURREN PLAN
	<u>II. Informational entries for classified pay increases effective January 9, 1972, applicable to fiscal 1973 programs</u>						
	Permanent				1,082		
	Other than permanent				2,483		
					3,565		
	<u>Other Personnel Compensation:</u>						
	Overtime Pay				19		
	Holiday Pay				80		
	Differentials				170		
					269		
	<u>Related Benefits:</u>						
	Permanent				108		
	Other than permanent				149		
					257		
	Total classified pay increase costs - (rounded)				4,100		

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

FINANCIAL PLAN - OPERATING PROGRAM

DETAIL BY COST FEATURE

NUMERICAL CODE

6/10/72

DATE

04-17-72

FISCAL YEAR

1973

ACCOUNT NO.

AREA OR OFFICE

Yellowstone National Park

FINANCE OFFICER

Midwest Region

APPROPRIATION SYMBOL AND TITLE

1431033 Management & Protection

ACTIVITY OR SUBACTIVITY

Forestry & Fire Control

COST ACCOUNT NUMBER	COST FEATURE	ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN
180	<u>Primary Work Elements</u>			
180	FIRE PROTECTION SERVICES (PRESUPPRESSION)	120,200		

FINANCIAL PLAN - OPERATING PROGRAM

DATE

4-21-72

FISCAL YEAR

1973

ACCOUNT NO.

REA OR OFFICE

Yellowstone National Park

FINANCE OFFICE

Midwest Region

APPROPRIATION SYMBOL AND TITLE

1431034 Maintenance and Rehabilitation

ACTIVITY OR SUBACTIVITY

Roads and Trails

COMPONENTS OF COST BY OBJECT CLASSIFICATION

ORIGINAL
PLANNET TOTAL
OF CHANGESCURRENT
PLAN

11 & 12 - Personnel Compensation and Benefits

(From Form 10-561a)

730,479

21 - Travel and Transportation of Persons

1,650

22 - Transportation of Things

2,650

23 - Rent, Communications, and Utilities

(Includes GSA Office Space Rental \$)

7,000

24 - Printing and Reproduction

-

25.1 - Other Services (Itemize on reverse side)

2,300

25.2 - Services of Other Agencies (Itemize on reverse side)

-

26 - Supplies and Materials and Non-Capitalized Equipment

(Direct Purchases)

108,123

31 - Equipment (Capital Acquisitions - Itemize Below)

2 - 1/2 ton pickup trucks @ 2,300 each

4,600

32 - Lands and Structures

-

41 - Grants, Subsidies, and Contributions

-

42 - Insurance Claims and Indemnities

-

61 - Depreciation of Equipment

725

Equipment Operations

303,425

Storehouse Operations

36,770

62 - Corral Operations

13,600

Shop Operations

35,300

Manufacturing of Stores and Equipment

-

63 - Utility Systems (NPS Operations Only)

TOTAL AUTHORIZED PLAN

1,246,622

DISTRIBUTION

EST. CUMULATIVE OBLIGATIONS BY APPORTIONMENT PERIOD (Quarterly or Triannual)

NO.	TO	COMPONENTS	FIRST	SECOND	THIRD	FOURTH
		Personal services (11 & 12) . . .	328,501	475,127	730,479	
		All Other Expenses	236,091	332,697	511,543	
		Capital Outlays (31)	-	4,600	4,600	
		Total Authorized Plan	564,592	812,424	1,246,622	

RECOMMENDED (Sig. & Title) . . . (Date)

CONCURRED (Sig. & Title) . . . (Date)

APPROVED (Sig. & Title) . . . (Date)

(Date)

Administrative Officer

Superintendent

Item 25.1 (Itemize)

Training By Other Agencies

500

Laundry Services

1000

Office Machine Maintenance

800

2300

FINANCIAL PLAN - OPERATING PROGRAM

DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

NUMBER AND CODE 6865
DATE April 11, 1972
FISCAL YEAR 1973
ACCOUNT NUMBER

AREA OR OFFICE

Yellowstone National Park

REGIONAL OFFICE

Midwest Region

APPROPRIATION SYMBOL AND TITLE

1431034 Maintenance and Rehabilitation

ACTIVITY OR SUBACTIVITY

Roads & Trails

POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN- YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURREN PLAN
	Permanent full-time positions						
6865-01	Supv. Civil Engr. (Nordgren)	13/5	1		21,237		
6865-11	Engineering Tech. (McCann)	9/5	1		12,518		
6865-12	Program Assistant (Stanley)	7/5	1		10,261		
6865-20	Maintenance Supv. (Hape)	12/3	1		16,924		
6865-33	Project Foreman (Hoppe)	Ungr.	1		12,397		
6865-35	Maintenance Foreman (Winkle)	Ungr.	1		12,480		
6865-63	Eng. Equip Opr. (Clarke)	Ungr.	1		9,318		
6865-65	Eng. Equip. Opr. (Hape)	Ungr.	1		9,318		
6865-66	Maintenance Foreman (Berg)	Ungr.	1		10,774		
6865-68	Eng. Equip. Oper. (Borresen)	Ungr.	1		9,318		
6865-70	Eng. Equip. Opr. (Marchington)	Ungr.	1		9,318		
6865-80	Maintenance Supvr. (Armstrong)	11/3	1		14,197		
6865-91	Maintenance Supvr. (Tobin)	11/4	1		14,641		
	Total Permanent		13	13.0	162,701		
	Deduct portion of salaries shown above paid from other account:						
	Buildings and Utilities			-3.0	-38,949		
	Add portion of salaries carried in other schedules paid from this account:						
	Buildings and Utilities			+1.2	+12,516		
	Adjusted total permanent			11.2	136,268		
	Deduct lapses (4%)			-0.5	-6,508		
	Net permanent			10.7	129,760		

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS
 FINANCIAL PLAN
 6845 - 6830
 DATE
 4-21-72
 FISCAL YEAR
 1973
 ACCOUNT NUMBER

AREA OR OFFICE		FINANCE OFFICE		FISCAL YEAR			
Yellowstone National Park		Midwest Region		1973			
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY		ACCOUNT NUMBER			
1431034 Maintenance and Rehabilitation		Roads and Trails					
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN- YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURREN PLAN
	Positions other than permanent:						
	Temporary full-time positions:						
	Secretary (Steno)	5/10	1	0.5	5,265		
	Clerk (North)	5/5	1	0.1	2,586		
	General Engineer	5/1	1	0.3	2,196		
	Clerk (South)	5/2	1	0.1	2,362		
	Clerk (Steno)	4/2	1	0.1	2,106		
	Clerk Typist	3/4	1	0.1	1,999		
	Clerk Typist	4/1	1	0.5	3,537		
	Clerk Typist	3/1	1	0.1	788		
	Clerk (West)	5/4	1	0.1	1,360		
	Clerk (Steno)	4/1	1	0.1	1,107		
	Road Foreman, WS-9	Ungr.	2	1.6	16,400		
	Road Foreman, WS-7	Ungr.	3	2.0	19,900		
	Maintenance Foreman, WS-10	Ungr.	2	1.8	18,400		
	Trail Foreman, WS-9	Ungr.	1	0.5	5,600		
	Trail Foreman, WS-6	Ungr.	1	0.5	4,900		
	Road Leader, WL-6	Ungr.	1	0.6	5,300		
	Trail Leader, WL-6	Ungr.	2	1.2	10,100		
	Engr. Equip. Oper., WG-11	Ungr.	11	6.4	58,800		
	Engr. Equip. Oper., WG-10	Ungr.	4	0.7	6,100		
	Engr. Equip. Oper., WG-8	Ungr.	15	3.6	29,727		
	Motor Vehicle Operator, WG-7	Ungr.	28	7.9	63,600		
	Motor Vehicle Operator, WG-6	Ungr.	21	2.1	17,200		
	Maint. Worker Trails, WG-6	Ungr.	11	6.2	48,400		
	Maint. Worker, WG-6	Ungr.	8	6.7	5,400		
	Maint. Worker, WG-5	Ungr.	13	1.5	11,100		
	Laborer	Ungr.	55	21.2	143,312		
	Maintenance Worker (Boche)	WG7/3	1	0.5	4,160		
	Laborer (Owens)	WG3/1	1	0.2	1,028		
	Total other than permanent		190	67.2	492,733		
	Other personnel compensation:						
	Overtime				7,946		
	Holiday pay				4,464		
	Sunday differential				6,472		
	Total other personnel com- pensation				18,882		
	Total personnel compensation				641,375		

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITSFUNDING CODE
6865-6800DATE
4-21-72

AREA OR OFFICE		FINANCIAL OFFICE				FISCAL YEAR	
Yellowstone National Park		Midwest Region				1973	
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY				ACCOUNT NUMBER	
1431034 Maintenance and Rehabilitation		Roads and Trails					
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN- YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
	Add personnel benefits: (10% of above "net permanent") (6% of above "other than permanent				16,270		
					29,564		
	<u>Uniform Allowance:</u>						
	Permanent				750		
	Temporary				2,966		
	Total personnel benefits				49,550		
	Total personnel compensation and benefits				690,925		
	<u>Anticipated current year cost of wage board increases to become effective between July 1, 1972 and June 30, 1973. Anticipated effective date: September 17, 1972</u>						
	<u>Personnel compensation:</u>						
	Permanent				5,332		
	Other than permanent				26,219		
	Total personnel compensa- tion				31,551		
	<u>Other personnel compensation:</u>						
	Overtime pay				2,102		
	Holiday pay				1,900		
	Night Differential				285		
	Sunday Differential				1,610		
	Total other personnel compensation				5,897		
	<u>Related benefits:</u>						
	(10% of above "permanent")				533		
	(6% of above "other than permanent")				1,573		
	Total related benefits				2,106		
	Total wage board increase costs personnel compensation and benefits				39,554		
	Total personnel compensation and benefits (Amount to be included on Form 10-561)				730,479		

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

AREA OR OFFICE		FINANCIAL OFFICE		FISCAL YEAR		ACCOUNT NUMBER	
Yellowstone National Park		Yellowstone Region		1973			
APPROPRIATION SYMBOL AND TITLE		ACTIVITY					
1431034 Maintenance and Rehabilitation		Roads and Trails					
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN- TEL	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
	I. <u>Informational entries for wage board increases to become effective during fiscal 1973.</u>						
	Estimate full-year cost of wage rate increases anticipated to become effective on <u>September 17, 1972</u>				60,657		
	Current year cost of wage rate increases to become effective during 1973 fiscal year, included in this plan (9 months)				39,554		
	Balance of full-year cost that will be needed as increases in 1974 fiscal year allowance (3 months)				21,103		
	II. <u>Informational entries for classified pay increases effective January 9, 1972 applicable to fiscal 1973 programs.</u>						
	Permanent				4,700		
	Other than permanent				2,300		
					7,000		
	<u>Other personnel compensation:</u>						
	Overtime pay				1,750		
	Holiday pay				1,050		
					2,800		
	<u>Related benefits:</u>						
	Permanent				470		
	Other than permanent				138		
					608		
	Total classified pay increase costs				10,400		

FINANCIAL PLAN OPERATING PROGRAM

DETAIL BY COST FEATURE

6865 - 688

4-21-72

AREA OR OFFICE

Yellowstone National Park

FINANCE OFFICER

Midwest Region

FISCAL YEAR

1973

APPROPRIATION SYMBOL AND TITLE

1431034 Maintenance & Rehabilitation

ACTIVITY OR SUBACTIVITY

Roads and Trails

ACCOUNT NO.

COST
ACCOUNT
NUMBER

COST FEATURE

ORIGINAL
PLANNET TOTAL
OF CHANGESCURRENT
PLAN

6865-230

Roads and Trails Maintenance

6865-231

Surfaced Roads-Roadway

694,600 ✓

6865-232

Surfaced Roads-Roadsides

51,500

6865-233

Graded Roads-Roadway

14,700

6865-234

Graded Roads-Roadsides

300

6865-235

Scenic Vistas

1,300

6865-236

Surfaced Trails

48,100

6865-237

Graded Trails

74,800

6865-238

Snow Removal

236,600

6865-239

Signs

5,300

6865-241

Training

1,000

6865-242

Management & Supervision

84,200

6865-243

Administration

10,000

68-244

Snow Grooming

14,300

6880-230

Roads and Trails Maintenance

7,922

TOTAL AUTHORIZED PLAN

1,246,622

FINANCIAL PLAN OPERATING PROGRAM
DETAIL BY COST FEATURE6066 3-6-70
DATE

AREA OR OFFICE		FINANCE OFFICE		FISCAL YEAR	
Yellowstone National Park		Midwest Region		1973	
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY		ACCOUNTING	
1431034 Maintenance and Rehabilitation		Roads and Trails			
COST ACCOUNT NUMBER	COST FEATURE		ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN
	Perm. Pos.	M.Y. Other	Total Auth. Plan	Info. Entry Classified Increase (73)	Info. Entry For W.P. I
Yellowstone National Park	13	66.5	1,268,878	10,400	39,578
Big Hold Nat. Battlefield	0	0.7	7,922	--	422
	13	67.2	1,276,800	10,400	40,000

[illegible]

FINANCIAL PLAN

Item 25.1

Training by Other Agencies

\$ 500

Office Machine Maintenance

550

Laundry and Dry Cleaning

300

Repairs to Electrical, Electronic and

Plumbing Equipment

5,000

Helicopter Rent

500

Underground Power and Telephone Relaction

6,150

\$ 13,000

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

NUMERICAL DATE	6-11-72
DATE	4-11-72
FISCAL YEAR	1973
ACCOUNT NUMBER	

AREA OR OFFICE		FINANCE OFFICE				FISCAL YEAR	
Yellowstone National Park		Midwest Region				1973	
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY				ACCOUNT NUMBER	
1431034 Maintenance and Rehabilitation		Buildings & Utilities					
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN-YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
	Permanent full-time positions						
6865-03	Civil Engineer (Fellbaum)	12/5	1		17,982	3866	
6865-07	Supv Elec Tech Radio (Huffman)	11/8	1		16,417		
6865-18	Maint Supervisor, (Patzloff)	11/3	1		14,197		
6865-27	Building Foreman (Guesenberry)	Ungr.	1		11,336		
6865-31	Electrician Foreman (Peterson)	Ungr.	1		12,480		
6865-39	Pipefitter Foreman (Wood)	Ungr.	1		11,336		
6865-47	Maintenanceman (Snodgrass)	Ungr.	1		9,090		
6865-49	Electrician (Vacant)	Ungr.	1		8,382		
6865-84	Maintenance Foreman (Welker)	Ungr.	1		10,774		
6865-88	Pipefitter (Dore)	Ungr.	1		9,090		
6865-89	Maintenance Supvr (Excell)	11/3	1		14,197	Y	
6865-55	Painter (Meeks)	Ungr	1		8,819		
			12	12.0	144,100		
	Deduct portion of salaries shown above paid from other account:						
	Roads and Trails			-1.2	-12,516		
	Quarters			-1.3	-12,469		
	Utility Clearing			-0.9	- 8,894		
	Add portion of salaries in other schedules paid from this account:						
	Roads and Trails			+3.0	+38,949		
	Quarters			+0.9	+ 9,271		
	Adjusted total permanent			12.5	158,441		
	Deduct papses (4%)			-0.5	-5,764		
	Net permanent			12.0	152,677		

FINANCIAL PLAN - OPERATING PROGRAM

6866

6866 - 6880

DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

DATE
4-13-72

AREA OR OFFICE		FINANCIAL OFFICE				FISCAL YEAR	
Yellowstone National Park		Midwest Region				1973	
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY				ACCOUNT NUMBER	
1431034 Maintenance and Rehabilitation		Buildings and Utilities					
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN-YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
	Positions other than permanent:						
	Temporary full-time positions:						
	Secretary (Steno)	5/10	1	0.4	3,290		
	Clerk (North)	5/5	1	0.3	2,107		
	Clerk (West)	5/4	1	0.1	1,107		
	Clerk (South)	5/2	1	0.3	1,922		
	Clerk (Steno)	4/2	1	0.3	1,716		
	Clerk Typist	3/4	1	0.2	1,626		
	Clerk Typist	4/1	1	0.4	1,663		
	Clerk Typist	3/1	1	0.1	641		
	Clerk (Steno)	4/1	1	0.1	901		
	Clerk Typist	3/3	1	0.9	5,741		
	Electronics Technician	9/3	1	0.9	10,867		
	Maintenance Foreman, WS-10	Ungr.	2	1.1	11,980		
	B&U Foreman, WS-10	Ungr.	1	0.5	6,820		
	B&U Foreman, WS-7	Ungr.	4	1.9	18,990		
	Forestry Foreman, WL-3	Ungr.	2	1.4	11,562		
	Grounds Leader, WL-5	Ungr.	1	0.5	4,450		
	Pipefitter Leader, WL-10	Ungr.	2	1.0	9,430		
	Electronic Equip Mech, WG-11	Ungr.	3	2.1	19,570		
	Electronic Equip Helper, WG-5	Ungr.	1	0.3	2,410		
	Electrician, WG-10	Ungr.	5	3.1	28,180		
	Electrical Worker, WG-5	Ungr.	3	1.5	11,000		
	Carpenter, WG-9	Ungr.	9	5.7	50,270		
	Carpenter Helper, WG-5	Ungr.	2	1.0	7,250		
	Painter, WG-9	Ungr.	4	1.9	16,760		
	Signmaker, WG-8	Ungr.	2	1.3	11,170		
	Motor Vehicle Operator, WG-7	Ungr.	4	1.2	9,610		
	Motor Vehicle Operator, WG-6	Ungr.	9	0.6	4,930		
	Maintenance Worker, WG-6	Ungr.	9	1.1	8,980		
	Maintenance Worker, WG-5	Ungr.	33	5.3	39,910		
	Pipefitter, WG-10	Ungr.	4	2.0	18,180		
	Pipefitter Helper, WG-5	Ungr.	1	0.5	3,620		
	Engr Equip Oper, WG-10	Ungr.	1	0.5	4,370		
	Engr Equip Oper, WG-8	Ungr.	1	0.5	4,130		
	Disposal Plant Oper, WG-7	Ungr.	3	1.0	8,320		
	Laborer, WG-3	Ungr.	32	10.1	63,275		
	Maintenance Worker, WG-7	Ungr.	1	0.4	3,520		
	Laborer, WG-3	Ungr.	-	-	275		
	Total other than permanent		150	50.5	415,543		

FINANCIAL PLAN - OPERATING PROGRAM

6266

NUMERIC INDEX	6855-0550
DATE	4-22-73
FISCAL YEAR	1973
ACCOUNT NUMBER	

DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

AREA OR OFFICE		FINANCE OFFICE			FISCAL YEAR		
Yellowstone National Park		Midwest Region			1973		
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY			ACCOUNT NUMBER		
1431034 Maintenance and Rehabilitation		Buildings and Utilities					
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN- YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
	Other personnel compensation:						
	Overtime pay				5,698		
	Holiday Pay				9,168		
	Night work differential				850		
	Sunday differential				8,584		
	Total other personnel compensation				24,300		
	Total personnel compensation				592,520		
	Add personnel benefits:						
	(10% of above "net permanent")				15,268		
	(6% of above "other than permanent")				24,932		
	Uniform allowances:						
	Permanent				500		
	Temporary				5,360		
	Total personnel benefits				46,060		
	Total personnel compensation and benefits				638,580		
	Anticipated current year cost of wage board increases to become effective between July 1, 1972, and June 30, 1973. Anticipated effective date: September 17, 1972						
	Personnel compensation:						
	Permanent				4,362		
	Other than permanent				21,432		
	Total personnel compensation				25,794		
	Other personnel compensation:						
	Overtime pay				2,382		
	Holiday pay				1,678		
	Night differential				256		
	Sunday differential				1,541		
	Total other personnel compensation				5,857		

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

6866

NUMERICAL CODE
DATE
11-21-73
FISCAL YEAR
1973
ACCOUNT NUMBER

AREA OR OFFICE		FINANCIAL OFFICE			FISCAL YEAR		
Yellowstone National Park		Midwest Region			1973		
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY			ACCOUNT NUMBER		
1431034 Maintenance and Rehabilitation		Buildings and Utilities					
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN- YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
	Related benefits:						
	(10% of above "Permanent")				436		
	(6% of above "other than Permanent")				1,287		
	Total related benefits				1,723		
	Total wage board increase costs - personnel compensa- tion and benefits				33,374		
	Total personnel compensation and benefits (Amount to be included on form 10-561)				671,954		

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

6866

NUMERIC CODE

6865-6880

DATE

4-13-73

FISCAL YEAR

1973

AREA OR OFFICE

Yellowstone National Park

FINANCE OFFICE

Midwest Region

APPROPRIATION SYMBOL AND TITLE

1431034 Maintenance & Rehabilitation

ACTIVITY OR SUBACTIVITY

Buildings and Utilities

ACCOUNT NUMBER

POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN- YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
	<u>I. Information Entries for Wage Board Increases</u> <u>To Become Effective During fiscal 1973</u>						
	Estimated full-year cost, of wage rate increases anticipated to become effective on <u>September 17, 1972</u>				55,624		
	Current year cost of wage rate increases to become effective during 1973 fiscal year, included in this plan (9 months)				33,418		
	Balance of full-year cost that will be needed as increases in 1974 fiscal year allowance (3 months)				22,206		
	<u>II. Informational Entries for Classified Pay Increases</u> <u>Effective January 9, 1972, applicable to fiscal 1973</u> <u>Programs</u>						
	Permanent				3,900		
	Other than permanent				1,400		
					5,300		
	<u>Other personnel compensation:</u>						
	Overtime pay				1,500		
	Holiday pay				900		
					2,400		
	<u>Related Benefits:</u>						
	Permanent				400		
	Other than permanent				100		
					500		
	Total classified pay increase costs				8,200		

FINANCIAL PLAN - OPERATING PROGRAM

DETAIL BY COST FEATURE

6866

NUMERICAL CODE

6865-6380

DATE

1-13-73

AREA OR OFFICE		FINANCE OFFICER		FISCAL YEAR
Yellowstone National Park		Midwest Region		1973
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY		ACCOUNT NO.
1431034 Maintenance and Rehabilitation		Buildings and Utilities		
COST ACCOUNT NUMBER	COST FEATURE	ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN
6865-260	Buildings and Utilities			
6865-261	Administration & Public Use Maint	141,475		
6865-262	Administration & Public Use Oper	94,415		
6865-263	Other Buildings - Maintenance	123,986		
6865-264	Other Buildings - Operations	45,100		
6865-265	Quarters Maintenance	---		
6865-266	Sanitation Systems	135,300		
6865-267	Water Systems	45,100		
6865-268	Sewer Systems	25,933		
6865-269	Electrical Systems	92,455		
6865-270	Heating Systems	55,000		
6865-272	Communications Systems	56,375		
6865-274	Training	1,000		
6865-275	Management & Supervision	68,778		
6865-276	Administration	15,148		
6865-277	Audio Visual Systems	12,403		
6865-281	Campground & Picnic Area	102,603		
6865-282	Trees, Shrubs, Grounds	66,523		
6865-285	Piers, Docks, Marinas	11,275		
6865-286	Fences & Walls	1,280		
6865-287	Signs & Interpretative Devices	14,658		
6865-289	General Grounds	1,280		
6865-294	Soil and Moisture Control	16,913		
6865-311	Diorama, Case Displays, Panels	500		
6880-260	Buildings and Utilities	6,618		
	TOTAL AUTHORIZED PLAN	1,134,118		

FINANCIAL PLAN - OPERATING PROGRAM

6866 6865 - 6860

DETAIL BY COST FEATURE

NUMBER	6865 - 6860
DATE	

AREA OR OFFICE		FINANCE OFFICE		FISCAL YEAR	
Yellowstone National Park		Midwest Region		1973	
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY		ACCOUNTING	
1431034 Maintenance and Rehabilitation		Buildings and Utilities			
COST ACCOUNT NUMBER	COST FEATURE		ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN
	Perm. Pos.	M.Y. Other	Total Auth. Plan	Info. Entry Classified Increased (73)	Info. Entry for W.R. In
Yellowstone National Park	11	51.1	1,176,600	8,200	33,800
Big Hole National Battlefield	0	.4	-6,218.00	--	318.00
	11	51.5	1,176,600	8,200	33,400

6961
DATE
4-21-70

FINANCIAL PLAN - OPERATING PROGRAM

AREA OR OFFICE		FINANCE OFFICE		FISCAL YEAR		
Yellowstone National Park		Midwest Region		1973		
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY		ACCOUNT NO.		
14X1035 Construction		Buildings & Utilities				
COMPONENTS OF COST BY OBJECT CLASSIFICATION		ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN		
11 & 12 - Personnel Compensation and Benefits (From Form 10-561a)		20,072				
21 - Travel and Transportation of Persons		600				
22 - Transportation of Things		900				
23 - Rent, Communications, and Utilities (Includes GSA Office Space Rental \$)						
24 - Printing and Reproduction						
25.1 - Other Services (Itemize on reverse side)		128				
25.2 - Services of Other Agencies (Itemize on reverse side)						
26 - Supplies and Materials and Non-Capitalized Equipment (Direct Purchases)		100				
31 - Equipment (Capital Acquisitions - Itemize Below) _____ _____ _____						
32 - Lands and Structures						
41 - Grants, Subsidies, and Contributions						
42 - Insurance Claims and Indemnities						
61 - Depreciation of Equipment Equipment Operations Storehouse Operations						
62 - Corral Operations Sign Shop Operations Manufacturing of Stores and Equipment						
63 - Utility Systems (NPS Operations Only)						
TOTAL AUTHORIZED PLAN		21,800				
DISTRIBUTION		EST. CUMULATIVE OBLIGATIONS BY APPORTIONMENT PERIOD (Quarterly or 12-month)				
NO.	TO	COMPONENTS	FIRST	SECOND	THIRD	FOUR
		Personal services (11 & 12)	6,590	13,285	20,072	
		All Other Expenses	475	653	1,728	
		Capital Outlays (31)				
		Total Authorized Plan	7,065	13,938	21,800	
RECOMMENDED (SIC & Title)		CONCURRED (SIC & Title)		APPROVED (SIC & Title)		(Date)
[Signature]		[Signature]		[Signature]		4/21/70

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

NUMERICAL CODE
6861
DATE
4-15-72
FISCAL YEAR
1973
ACCOUNT NUMBER

AREA OR OFFICE	FINANCE OFFICE	
Yellowstone National Park	Midwest Region	
APPROPRIATION SYMBOL AND TITLE	ACTIVITY OR SUBACTIVITY	
14X1035	Buildings & Utilities	

POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN- YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
6861-04	Civil Engineer (Townsend)	12/6	1		18,247		
	Net Permanent		1		18,247		
	Add Personnel Benefits (10% of above "net permanent")				1,825		
	Total Personnel Benefits				1,825		
	Total personnel compensation and benefits (amount to be included on Form 10-561)				20,072		
II Informational Entries for Classified Pay Increases Effective Jan. 9, 1972, applicable to Fiscal 1973 Programs							
	Permanent				960		
	<u>Related Benefits</u>						
	Permanent				96		
	Total Classified Pay Increase Costs (rounded)				1,100		

FINANCIAL PLAN - OPERATING PROGRAM

6862
DATE
4-21-72

AREA OR OFFICE		FINANCE OFFICE		FISCAL YEAR		
Yellowstone National Park		Midwest Region		1973		
APPROPRIATION SYMBOL AND TITLE (Business Type)		ACTIVITY OR SUBACTIVITY		ACCOUNT NO.		
14X1035 Construction (Clearing Account)		Storehouse Operations				
COMPONENTS OF COST BY OBJECT CLASSIFICATION		ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN		
11 & 12 - Personnel Compensation and Benefits (From Form 10-561a)		64,187				
21 - Travel and Transportation of Persons		300				
22 - Transportation of Things		1,000				
23 - Rent, Communications, and Utilities (Includes GSA Office Space Rental \$)		1,300				
24 - Printing and Reproduction						
25.1 - Other Services (Itemize on reverse side)		352,265				
25.2 - Services of Other Agencies (Itemize on reverse side)						
26 - Supplies and Materials and Non-Capitalized Equipment (Direct Purchases)		1,500				
31 - Equipment (Capital Acquisitions - Itemize Below)						
<u>Floor cleaner and sweeper 1200</u>		1,200				
32 - Lands and Structures						
41 - Grants, Subsidies, and Contributions						
42 - Insurance Claims and Indemnities						
61 - Depreciation of Equipment		300				
Equipment Operations		1,743				
Storehouse Operations		1,705				
62 - Corral Operations						
Sign Shop Operations						
Manufacturing of Stores and Equipment						
63 - Utility Systems (NPS Operations Only)						
TOTAL AUTHORIZED PLAN		425,500				
DISTRIBUTION		EST. CUMULATIVE OBLIGATIONS BY APPORTIONMENT PERIOD (Quarterly or Triannual)				
NO.	TO	COMPONENTS	FIRST	SECOND	THIRD	FOURTH
		Personal services (11 & 12)	23,723	42,982	64,187	
		All Other Expenses	156,622	235,563	300,113	
		Capital Outlays (31)	-	1,200	1,200	
		Total Authorized Plan	180,345	279,745	425,500	
RECOMMENDED (Sig. & Title)		CONCURRED (Sig. & Title)		APPROVED (Sig. & Title)		
Kurt J. [Signature] Administrative Officer		[Signature] ACTING Superintendent		[Signature] Director Midwest Region		

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

NUMERICAL INDEX
6862-6873
DATE
4-21-72
FISCAL YEAR
1973
ACCOUNT NUMBER

AREA OR OFFICE		FINANCE OFFICE				FISCAL YEAR	
Yellowstone National Park		Midwest Region				1973	
APPROPRIATION SYMBOL AND TITLE (Business Type)		ACTIVITY OR SUBACTIVITY				ACCOUNT NUMBER	
14X1035 Construction Clearing Acct.)		Storehouse Operations					
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN-YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
6862-13	Permanent full-time positions:					6873	
	Proc. & Prop. Mgmt. Officer (Wintch)	12/5	1		17,982		
6862-38	Supv. Supply Tech. (Tyson)	7/3	1		9,657		
	Net Permanent		2	2.0	27,639		
	Positions other than permanent:					6873	
	Temporary full-time employment:						
	Supply Clerk (Levandowski)	5/4	1	0.9	7,247		
	Clerk (Typing) (Pratt)	4/4	1	0.7	5,039		
	Warehouseman (Yerigan)	Ungr.	1	0.9	7,040		
	Warehouseman (Jacobs)	Ungr.	1	0.9	7,040		
	Warehouseman (Harris)	Ungr.	1	0.3	2,259		
	Warehouseman (Peterson)	Ungr.	1	0.3	2,171		
	Total other than permanent		6	4.0	30,796		
	Other personnel compensation						
	Overtime pay				1,000		
	Holiday pay				50		
	Total other personnel compensation				1,050		
	Total personnel compensation				59,485		
	Add Personnel Benefits:						
	(10% of above "net permanent"				2,764		
	(6% of above "other than permanent")				1,848		
	Uniform Allowance:						
	Temporary				90		
	Total personnel benefits				4,702		
	Total personnel compensation and benefits				64,187		

FINANCIAL PLAN - OPERATING PROGRAM

DETAIL BY COST FEATURE

 NUMBER 10862-62-
 DATE 4-21-72

AREA OR OFFICE			FINANCE OFFICE		FISCAL YEAR
Yellowstone National Park			Midwest Region		1973
APPROPRIATION SYMBOL AND TITLE (Business Type			ACTIVITY OR SUBACTIVITY		ACCOUNT NO.
14X1035 Construction Clearing Account)			Storehouse Operations		
COST ACCOUNT NUMBER	COST FEATURE		ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN
	Perm. Pos.	M.Y. Other			
	Total authorized plan as shown on Form 10-561				
	<u>2</u>	<u>4.0</u>	<u>425,500</u>		
	Deduct storehouse charges applicable to other <u>clearing</u> <u>accounts</u> , as follows:				
	Equipment operations	- -	-187,396		
	Corral operations	- -	- 1,500		
	Storehouse operations	- -	- 1,705		
	Reimbursements:				
	Water & Sewer	- -	- 9,200		
	Sanitation Service	- -	- 5,650		
	Sanitation Disposal	- -	- 13,000		
	Deduct storehouse charges applicable to all other Forms 10-561 as follows:				
Management	of park & other areas	-1 -0.2	-13,064		
	Management - 3,000				
	Interpretation - 2,000				
	Resource Mgmt. - 7,864				
	Biologists - 200				
Forestry and Fire Control			- 800		
Roads & Trails Maintenance	- -0.8		- 36,500		
Buildings & Utilities Maint.	-1 -2.1		-106,746		
Educational Expenses - School	- -0.1		- 2,500		
Quarters Operations	- -0.8		- 40,733		
Roads & Trails Maint. Big Hole			- 270		
Bldgs. & Util. Maint. Big Hole			- 250		
Management of Park & OA Big Hole			- 100		
Other reimbursable services			- 6,086		
	<u>-0-</u>	<u>-0-</u>	<u>-0-</u>		

4-21-72

FINANCIAL PLAN - OPERATING PROGRAM

AREA OR OFFICE		FINANCE OFFICE		FISCAL YEAR	
Yellowstone National Park		Midwest Region		1973	
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY		ACCOUNT NO.	
14X1035 Construction		Shop Operations			
COMPONENTS OF COST BY OBJECT CLASSIFICATION		ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN	
11 & 12 - Personnel Compensation and Benefits (From Form 10-561a)		180,667			
21 - Travel and Transportation of Persons		1,500			
22 - Transportation of Things					
23 - Rent, Communications, and Utilities (Includes GSA Office Space Rental \$)		5,000			
24 - Printing and Reproduction					
25.1 - Other Services (Itemize on reverse side)		1,500			
25.2 - Services of Other Agencies (Itemize on reverse side)					
26 - Supplies and Materials and Non-Capitalized Equipment (Direct Purchases)		1,500			
31 - Equipment (Capital Acquisitions - Itemize Below)					
Metal lathe 4,500					
Misc. tools 1,000					
		5,500			
32 - Lands and Structures					
41 - Grants, Subsidies, and Contributions					
42 - Insurance Claims and Indemnities					
61 - Depreciation of Equipment		191,750			
Equipment Operations		2,100			
Storehouse Operations		187,396			
62 - Corral Operations					
Sign Shop Operations					
Manufacturing of Stores and Equipment					
63 - Utility Systems (NPS Operations Only)					
TOTAL AUTHORIZED PLAN		576,913			

DISTRIBUTION		EST. CUMULATIVE OBLIGATIONS BY APPORTIONMENT PER MO. (Quarterly or Tri Annual)				
NO.	TO	COMPONENTS	FIRST	SECOND	THIRD	FOURTH
6	MVRO	Personal services (11 & 12)	60,222	120,444	180,667	
2	Admin. Officer	All Other Expenses	5,500	5,500	5,500	
1	Asst. Supt. (OPR)	Capital Outlays (31)	130,249	260,498	390,746	
	Motor Equip. Mgr.					
1	Files	Total Authorized Plan	195,971	386,442	576,913	

RECOMMENDED (Sig. & Title)	(Date)	CONCURRED (Sig. & Title)	(Date)	APPROVED (Sig. & Title)	(Date)
<i>Robert J. Smith</i>					

ACTING SUPERINTENDENT

FINANCIAL PLAN - CAPITAL BUDGETING PROGRAM

25.1 Other Services:

Equipment Rental Storage - Yellowstone Park Co. \$1,500

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

NUMERICAL INDEX
-6862- 4873
DATE
4-21-72
FISCAL YEAR
1973
ACCOUNT NUMBER

AREA OR OFFICE		FINANCE OFFICE				FISCAL YEAR	
Yellowstone National Park		Midwest Region				1973	
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY				ACCOUNT NUMBER	
14X1035 Construction		Shop Operations					
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN-YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
	<u>Permanent Full-Time Positions</u>						
6862-68	Mechanic Leader (Gillett)	WL11/3	1	1.0	10,275	3873	
6862-69	Heavy Duty Mechanic (Smith,V)	WG11/3	1	1.0	9,318		
6862-70	Mechanic Foreman (Herne)	WS11/3	1	1.0	11,814		
6862-71	Heavy Duty Mechanic (Tandy)	WG11/3	1	1.0	9,318		
6862-72	Motor Equipment Mgr. (Ballard)	GS11/9	1	1.0	16,861		
6862-73	Heavy Duty Mechanic (Gray)	WG11/3	1	1.0	9,318		
6862-75	Equip. Dispatcher (Bauer)	WG08/3	1	1.0	8,590		
6862-76	Mechanic Automotive (Smith,C)	WG10/3	1	1.0	9,090		
6862-77	Mechanic Automotive (Manning)	WG10/3	1	1.0	9,090		
	Total Permanent		9	9.0	93,674		
	Deduct lapses (4%)			-0.4	- 3,747		
	Net Permanent			8.6	89,927		
	<u>Positions other than Permanent</u>						
	Mechanic Heavy Duty (Yanc)	WG11/3	1	0.9	8,602	3873	
	Mechanic Automotive (Roberts)	WG10/3	1	0.9	8,390		
	Mechanic Automotive (Ludwig)	WG10/3	1	0.9	8,390		
	Automotive Mechanic (Gwaltney)	WG10/3	1	0.9	8,390		
	Body & Fender Repairman (Wick)	WG10/3	1	0.9	8,390		
	Automotive Mechanic (Abegglen)	WG10/3	1	0.9	8,064		
	Automotive Worker (Dolsman)	WG05/3	1	0.9	7,219		
	Warehouseman (Harris)	WG05/2	1	0.9	6,950		
	Automotive Worker (Maksim)	WG05/1	1	0.7	5,011		
	Automotive Worker (Vacant)	WG05/1	1	0.7	5,011		
	Total other than Permanent		10	8.6	74,417		
	<u>Other Personnel Compensation</u>						
	Overtime Pay				1,800		
	Total Personnel Compensation				166,144		

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

NUMERIC	-6862- 22-2
DATE	4-21-72

AREA OR OFFICE		FINANCE OFFICE			FISCAL YEAR		
Yellowstone National Park		Midwest Region			1973		
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY			ACCOUNT NUMBER		
14X1035 Construction		Shop Operations					
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN- YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
	Add Personnel Benefits: (10% of above "net Perma- nent") (6% of above "other than permanent")				8,993 4,465		
	<u>Uniform Allowance</u> Permanent Other than permanent				675 390		
	Total personnel benefits				14,523		
	Total personnel compensation and benefits (amount to be included on Form 10-561)				180,667		
	Mechanic Heavy Duty Truck Mechanic Automotive (Roberts) Mechanic Automotive (General) Automotive Worker (Polisman) Automotive Worker (Havril) Automotive Worker (General) Automotive Worker (General)						

FINANCIAL PLAN - OPERATING PROGRAM

DETAIL BY COST FEATURE

6862

DATE

4-21-72

FISCAL YEAR

1973

Z.A. OR OFFICE

Yellowstone National Park

FINANCE OFFICE

Midwest Region

APPROPRIATION SYMBOL AND TITLE

14X1035 Construction

ACTIVITY OR SUBACTIVITY

Shop Operations

ACCOUNT NO.

COST
ACCOUNT
NUMBER

COST FEATURE

ORIGINAL
PLANNET TOTAL
OF CHANGESCURRENT
PLAN

Total Authorized Plan

576,913

Deduct shop operation charges
applicable to other clearing
accounts as follows:

62. Equipment Operations

2,100

62. Corral Operations

4,900

62. Stores Operations

1,743

62. Other Reimbursable Services
Water & Sewer

14,750

62. Other Reimbursable Services
Sanitation

31,850

Net program to be distributed

521,570

Deduct shop operations charges
scheduled on other Forms 10-561
as follows:

Management of Park & Other Areas

99,340

Forestry & Fire Control

9,420

Roads & Trails Maintenance

338,275

Buildings & Utilities

50,436

Quarters Operations

1,600

Educational Expenses

500

Management - Big Hole

720

Roads & Trails - Big Hole

500

Buildings & Utilities - Big Hole

100

Other Area (GSA, Post Office, Day
Labor Construction)

20,679

TOTAL

-0-

FINANCIAL PLAN - OPERATING PROGRAM

DATE
04-18-72FISCAL YEAR
1973

ACCOUNT NO.

AREA OR OFFICE Yellowstone National Park	FINANCE OFFICE Midwest Region		
APPROPRIATION SYMBOL AND TITLE 14X1035 - Construction	ACTIVITY OR SUBACTIVITY Corral Operations		
COMPONENTS OF COST BY OBJECT CLASSIFICATION	ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN
11 & 12 - Personnel Compensation and Benefits (From Form 10-561a)	19,869		
21 - Travel and Transportation of Persons	300		
22 - Transportation of Things	---		
23 - Rent, Communications, and Utilities (Includes GSA Office Space Rental \$ _____)	200		
24 - Printing and Reproduction	---		
25.1 - Other Services (Itemize on reverse side)	3,950		
25.2 - Services of Other Agencies (Itemize on reverse side)	---		
26 - Supplies and Materials and Non-Capitalized Equipment (Direct Purchases)	7,302		
31 - Equipment (Capital Acquisitions - Itemize Below) 7 horses \$1,400 _____ _____ _____	1,400		
32 - Lands and Structures	---		
41 - Grants, Subsidies, and Contributions	---		
42 - Insurance Claims and Indemnities	---		
61 - Depreciation of Equipment	---		
Equipment Operations	4,700		
Storehouse Operations	1,500		
62 - Corral Operations	---		
Sign Shop Operations	200		
Manufacturing of Stores and Equipment	---		
63 - Utility Systems (NPS Operations Only)	---		
TOTAL AUTHORIZED PLAN	39,421		

DISTRIBUTION		EST. CUMULATIVE OBLIGATIONS BY APPORTIONMENT PERIOD (Quarterly or Triannual)				
NO.	TO	COMPONENTS	FIRST	SECOND	THIRD	FOURTH
		Personal services (11 & 12) . . .	7,134	12,271	19,560	
		All Other Expenses	10,370	14,520	18,152	
		Capital Outlays (31)	—	600	1,400	
		Total Authorized Plan	17,504	27,391	39,421	

RECOMMENDED (Sig. & Title) Harold J. Eddy 4/17/72 Chief Park Ranger	(Date)	CONCURRED (Sig. & Title) ACTING Superintendent	(Date)	APPROVED (Sig. & Title)	(Date)
---	--------	---	--------	-------------------------	--------

Breakdown of item 25.1

Contract Horseshoeing	\$1,300
Winter Pasture	2,500
Veterinarian Services	<u>150</u>
	\$3,950

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

NUMERIC PLAN

6804

DATE

04-15-72

FISCAL YEAR

1973

AREA OR OFFICE		FINANCIAL OFFICE				ACCOUNT NUMBER	
Yellowstone National Park		Midwest Region				1973	
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY				ACCOUNT NUMBER	
14X1035 Construction		Corral Operations					
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN- YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
	<u>Positions Other Than Permanent:</u>						
	<u>Temporary Full-Time Employment</u>						
	Animal Packer Foreman	WS 8/2	1	0.9	9,920		
	Animal Packer	WG 9/1	1	0.9	7,840		
	Total Other Than Permanent		2	1.8	17,760		
	<u>Other Personnel Compensation:</u>						
	Overtime Pay				665		
	Holiday Pay				138		
	Sunday Differential				240		
	Total other personnel Compensation				1,043		
	Total Personnel Compensation				18,803		
	<u>Add Personnel Benefits:</u>						
	(6% of above "other than permanent")				1,066		
	Total Personnel Benefits				1,066		
	Total Personnel Compensation and benefits (amount to be included on Form 10-561)				19,869		

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL BY COST FEATURE

6864
DATE 04-18-72
FISCAL YEAR 1973
ACCOUNT NO.

AREA OR OFFICE		FINANCE OFFICE		
Yellowstone National Park		Midwest Region		
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY		
14X1035 Construction		Corral Operations		
COST ACCOUNT NUMBER	COST FEATURE	ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN
	Total Authorized Program	39,421		
	Net Program to be Distributed	39,421		
	<u>Deduct Corral Charges Scheduled</u> <u>on other forms of 10-561 as follows:</u>			
	Management of Park & Other Areas	14,235		
	Roads and Trails	13,600		
	Forestry and Fire Control	6,023		
	Biologists	1,800		
	Naturalists	1,100		
	Radio Shop	2,200		
	Other reimbursable services	463		
		39,421		
	BALANCE	0		

FINANCIAL PLAN - OPERATING PROGRAM

DATE

4-13-72

FISCAL YEAR

1973

ACCOUNT NO.

REA OR OFFICE	FINANCE OFFICE	
Yellowstone National Park	Midwest Region	
APPROPRIATION SYMBOL AND TITLE	ACTIVITY OR SUBACTIVITY	
14X1035 Construction	Water and Sewer	

COMPONENTS OF COST BY OBJECT CLASSIFICATION	ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN
11 & 12 - Personnel Compensation and Benefits (From Form 10-561a)	100,444		
21 - Travel and Transportation of Persons	---		
22 - Transportation of Things	---		
23 - Rent, Communications, and Utilities (Includes GSA Office Space Rental \$ _____)	23,000		
24 - Printing and Reproduction	---		
25.1 - Other Services (Itemize on reverse side)	---		
25.2 - Services of Other Agencies (Itemize on reverse side)	----		
26 - Supplies and Materials and Non-Capitalized Equipment (Direct Purchases)	15,500		
31 - Equipment (Capital Acquisitions - Itemize Below) _____ _____ _____	---		
32 - Lands and Structures	---		
41 - Grants, Subsidies, and Contributions	---		
42 - Insurance Claims and Indemnities	---		
61 - Depreciation of Equipment	---		
Equipment Operations	13,750		
Storehouse Operations	9,200		
62 - Corral Operations	---		
Stock Shop Operations	1,000		
Manufacturing of Stores and Equipment			
63 - Utility Systems (NPS Operations Only)			
TOTAL AUTHORIZED PLAN	169,894		

DISTRIBUTION		EST. CUMULATIVE OBLIGATIONS BY APPORTIONMENT PERIOD (Quarterly or Triannual)				
NO.	TO	COMPONENTS	FIRST	SECOND	THIRD	FOURTH
		Personal services (11 & 12) . . .	45,200	45,000	100,200	
		All Other Expenses	31,252	45,343	169,450	
		Capital Outlays (31)				
		Total Authorized Plan	76,452	130,433	169,894	

RECOMMENDED (Sig. & Title)

(Date)

CORRECTED (Sig. & Title)

(Date)

APPROVED

(Sig. & Title)

(Date)

FINANCIAL PLAN - OPERATING PROGRAM

DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

NUMERIC CODE

-6889 1/2-11

DATE

4-13-73

FISCAL YEAR

1973

AREA OR OFFICE		FINANCE OFFICE				FISCAL YEAR	
Yellowstone National Park		Midwest Region				1973	
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY				ACCOUNT NUMBER	
14X1035 Construction		Water and Sewer					
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN- YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
	Permanent full-time positions: Add portion of salaries carried in other schedules paid from this account:						
	buildings & Utilities			0.9	8,894		
	Quarters			0.7	5,100		
	Net permanent			1.6	13,994		
	Positions other than permanent:						
	Temporary full-time employment:						
	Disposal Plant Oper., WG-7	Ungr.	6	2.8	23,296		
	Pipefitter, WG-10	Ungr.	4	2.4	21,804		
	Engr. Equip. Oper, WG-11	Ungr.	1	0.7	6,275		
	Motor Vehicle Operator, WG-7	Ungr.	1	0.6	4,805		
	Motor Vehicle Operator, WG-6	Ungr.	1	0.6	4,655		
	Pipefitter Helper, WG-5	Ungr.	1	0.6	4,520		
	Laborer, WG-3	Ungr.	3	1.7	11,490		
	Total other than permanent		17	9.4	76,845		
	Other personnel compensation:						
	Overtime pay				1,375		
	Holiday pay				910		
	Sunday differential				1,310		
	Total other personnel compensation				3,595		
	Total personnel compensa- tion				94,434		
	Add personnel benefits:						
	(10% of above "net permanent")				1,399		
	(6% of above "other than permanent")				4,611		
	Total personnel benefits				6,010		
	Total personnel compensa- tion and benefits				100,444		

FINANCIAL PLAN - OPERATING PROGRAM

DETAIL BY COST FEATURE

NUMBER 6014
6665-6771
DATE
4-13-72

AREA OR OFFICE		FINANCE OFFICE		FISCAL YEAR
Yellowstone National Park		Midwest Region		1973
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY		ACCOUNT NO.
14X1035 Construction		Water and Sewer		
COST ACCOUNT NUMBER	COST FEATURE	ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN
	Total Authorized Plan	155,900		
	Deduct water and sewer charges on other forms 10-561 as follows:			
	Quarters 380-10	7,480		
	Water and sewer income 380-01	93,100		
	Water and sewer Gov't 154-10	55,320		
		-0-		

WORK ORDER

Area or Office
Yellowstone National Park

Region
MW

No.

Date

April 13, 1972

General Ledger Acct. No.

The _____ (Organizational Unit)

Fund Symbol
14X1035

under the supervision of _____ is
authorized and requested to proceed with the performance of the work or
service described below in accordance with the detail and plan more specifi-
cally set forth in the drawing or plan referred to herein.

Statutory Authority (where necessary)

Plan No.

Title and/or Description of Project or Service to be Performed

WP No.

Year Programmed
1973

Water and Sewer

Est. Starting Date
July 1, 1972

Est. Completion Date
June 30, 1973

Location of Work Requested

ESTIMATE OF COSTS

Components of Costs	Amount	Account Code	Project Features	Amount
Personnel Services	100,444		Quarters 5%	8,495
Rent, Communications and Utilities	29,000		Reimbursable Water and Sewer 60%	101,936
Supplies and Materials	16,500		Water and Sewer Systems Gov't 35%	59,463
Equipment Operation & Depr.	13,750			
Storehouse Operations	9,200			
Shop Operations	1,000			
TOTAL	169,894		TOTAL	169,894

Distribution of Copies	Remark
No. TO	
Approved by (Signature, Title, & Date)	ALLOTMENT ACTION
Superintendent	Allotment Advice No.
Regional Office Clearance when Required (Signature, Title, & Date)	Allotment Advice Date
	Amount for Work Order

If Additional Space is Necessary, Use Reverse in Turned Fashion

DATE
4-13-72

FINANCIAL PLAN - OPERATING PROGRAM

FISCAL YEAR

1973

ACCOUNT NO.

AREA OR OFFICE

Yellowstone National Park

FINANCE OFFICE

Midwest Region

APPROPRIATION SYMBOL AND TITLE

14X1035 Construction

ACTIVITY OR SUBACTIVITY

Sanitation Collection Svcs

COMPONENTS OF COST BY OBJECT CLASSIFICATION	ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN
11 & 12 - Personnel Compensation and Benefits (From Form 10-561a)	89,320		
21 - Travel and Transportation of Persons			
22 - Transportation of Things			
23 - Rent, Communications, and Utilities (Includes GSA Office Space Rental \$)	100		
24 - Printing and Reproduction			
25.1 - Other Services (Itemize on reverse side)			
25.2 - Services of Other Agencies (Itemize on reverse side)			
26 - Supplies and Materials and Non-Capitalized Equipment (Direct Purchases)	1,500		
31 - Equipment (Capital Acquisitions - Itemize Below)			
.			
.			
.			
32 - Lands and Structures			
41 - Grants, Subsidies, and Contributions			
42 - Insurance Claims and Indemnities			
61 - Depreciation of Equipment			
Equipment Operations	22,000		
Storehouse Operations	5,650		
62 - Corral Operations			
Shop Shop Operations	450		
Manufacturing of Stores and Equipment			
63 - Utility Systems (NPS Operations Only)			
TOTAL AUTHORIZED PLAN	123,020		

DISTRIBUTION		EST. CUMULATIVE OBLIGATIONS BY APPORTIONMENT PERIOD (Quarterly or Tri-annual)				
NO.	TO	COMPONENTS	FIRST	SECOND	THIRD	FOURTH
		Personal services (11 & 12) . . .	49,125	13,400	62,320	
		All Other Expenses	18,535	5,355	33,700	
		Capital Outlays (31)	-0-	-0-	-0-	
		Total Authorized Plan	67,660	18,755	123,020	

RECOMMENDED (Sig. & Title)

(Date)

CONCURRED (Sig. & Title)

(Date)

APPROVED (Sig. & Title)

(Date)

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

NUMERICAL CODE
70865 6-8-14
DATE
4-13-72
FISCAL YEAR
1973
ACCOUNT NUMBER

AREA OR OFFICE		FINANCE OFFICE			FISCAL YEAR		
Yellowstone National Park		Midwest Region			1973		
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY			ACCOUNT NUMBER		
14X1035 Construction		Sanitation Collection Svcs.					
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN- YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
	Positions other than permanent:						
	Maintenance Foreman, WS-10	Ungr.	1	0.3	3,315		
	B & U Foreman, WS-7	Ungr.	1	0.6	6,070		
	Motor Vehicle Oper., WG-7	Ungr.	9	4.2	33,635		
	Motor Vehicle Oper., WG-6	Ungr.	5	1.4	10,860		
	Laborer, WG-3	Ungr.	14	3.6	24,375		
	Total other than permanent		30	10.1	78,255		
	Other personnel compensation:						
	Overtime pay				1,160		
	Holiday pay				2,080		
	Sunday differential				1,900		
	Total other personnel compensation				5,140		
	Total personnel compensation				83,395		
	Personnel Benefits:						
	(6% of above "other than permanent")				4,695		
	Uniform Allowance:						
	Temporary				1,230		
	Total personnel benefits				5,925		
	Total personnel compensation and benefits				89,320		

FINANCIAL PLAN: OPERATING PROGRAM

DETAIL BY COST FEATURE

NUCLEAR C

-686- 22-

DATE

4-73-72

IF SCAL YEAR

1973

ACCOUNT NO

AREA OR OFFICE

Yellowstone National Park

FINANCE OFFICE

Midwest Region

[illegible]

14X1035 Construction

ACTIVITY OR SUBACTIVITY

Sanitation Collection Svcs.

COST
ACCOUNT
NUMBER

COST FEATURE

ORIGINAL
PLAN

NET TOTAL
OF CHANGES

CURRENT
PLAN

Total Authorized Plan

123,020

Deduct sanitation collection charges on other Forms 10-561 as follows:

Quarters

4,920

Reimbursable Sanitation

61,510

Sanitation Systems

56,590

-0-

Figure 1. The effect of the concentration of the *Agrobacterium* suspension on the transformation efficiency of *Agrobacterium* strains. The number of transformed cells was determined by the number of colonies obtained after plating on the selective medium. The results are the mean of three independent experiments. Error bars represent standard deviation.

... ..

Figure 1. The effect of the concentration of the polymer on the gelation time of the polymer solution. The concentration of the polymer was 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0, 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 2.0, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 3.0, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 4.0, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 5.0, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9, 6.0, 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8, 6.9, 7.0, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 8.0, 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 8.7, 8.8, 8.9, 9.0, 9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.7, 9.8, 9.9, 10.0, 10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 10.7, 10.8, 10.9, 11.0, 11.1, 11.2, 11.3, 11.4, 11.5, 11.6, 11.7, 11.8, 11.9, 12.0, 12.1, 12.2, 12.3, 12.4, 12.5, 12.6, 12.7, 12.8, 12.9, 13.0, 13.1, 13.2, 13.3, 13.4, 13.5, 13.6, 13.7, 13.8, 13.9, 14.0, 14.1, 14.2, 14.3, 14.4, 14.5, 14.6, 14.7, 14.8, 14.9, 15.0, 15.1, 15.2, 15.3, 15.4, 15.5, 15.6, 15.7, 15.8, 15.9, 16.0, 16.1, 16.2, 16.3, 16.4, 16.5, 16.6, 16.7, 16.8, 16.9, 17.0, 17.1, 17.2, 17.3, 17.4, 17.5, 17.6, 17.7, 17.8, 17.9, 18.0, 18.1, 18.2, 18.3, 18.4, 18.5, 18.6, 18.7, 18.8, 18.9, 19.0, 19.1, 19.2, 19.3, 19.4, 19.5, 19.6, 19.7, 19.8, 19.9, 20.0, 20.1, 20.2, 20.3, 20.4, 20.5, 20.6, 20.7, 20.8, 20.9, 21.0, 21.1, 21.2, 21.3, 21.4, 21.5, 21.6, 21.7, 21.8, 21.9, 22.0, 22.1, 22.2, 22.3, 22.4, 22.5, 22.6, 22.7, 22.8, 22.9, 23.0, 23.1, 23.2, 23.3, 23.4, 23.5, 23.6, 23.7, 23.8, 23.9, 24.0, 24.1, 24.2, 24.3, 24.4, 24.5, 24.6, 24.7, 24.8, 24.9, 25.0, 25.1, 25.2, 25.3, 25.4, 25.5, 25.6, 25.7, 25.8, 25.9, 26.0, 26.1, 26.2, 26.3, 26.4, 26.5, 26.6, 26.7, 26.8, 26.9, 27.0, 27.1, 27.2, 27.3, 27.4, 27.5, 27.6, 27.7, 27.8, 27.9, 28.0, 28.1, 28.2, 28.3, 28.4, 28.5, 28.6, 28.7, 28.8, 28.9, 29.0, 29.1, 29.2, 29.3, 29.4, 29.5, 29.6, 29.7, 29.8, 29.9, 30.0, 30.1, 30.2, 30.3, 30.4, 30.5, 30.6, 30.7, 30.8, 30.9, 31.0, 31.1, 31.2, 31.3, 31.4, 31.5, 31.6, 31.7, 31.8, 31.9, 32.0, 32.1, 32.2, 32.3, 32.4, 32.5, 32.6, 32.7, 32.8, 32.9, 33.0, 33.1, 33.2, 33.3, 33.4, 33.5, 33.6, 33.7, 33.8, 33.9, 34.0, 34.1, 34.2, 34.3, 34.4, 34.5, 34.6, 34.7, 34.8, 34.9, 35.0, 35.1, 35.2, 35.3, 35.4, 35.5, 35.6, 35.7, 35.8, 35.9, 36.0, 36.1, 36.2, 36.3, 36.4, 36.5, 36.6, 36.7, 36.8, 36.9, 37.0, 37.1, 37.2, 37.3, 37.4, 37.5, 37.6, 37.7, 37.8, 37.9, 38.0, 38.1, 38.2, 38.3, 38.4, 38.5, 38.6, 38.7, 38.8, 38.9, 39.0, 39.1, 39.2, 39.3, 39.4, 39.5, 39.6, 39.7, 39.8, 39.9, 40.0, 40.1, 40.2, 40.3, 40.4, 40.5, 40.6, 40.7, 40.8, 40.9, 41.0, 41.1, 41.2, 41.3, 41.4, 41.5, 41.6, 41.7, 41.8, 41.9, 42.0, 42.1, 42.2, 42.3, 42.4, 42.5, 42.6, 42.7, 42.8, 42.9, 43.0, 43.1, 43.2, 43.3, 43.4, 43.5, 43.6, 43.7, 43.8, 43.9, 44.0, 44.1, 44.2, 44.3, 44.4, 44.5, 44.6, 44.7, 44.8, 44.9, 45.0, 45.1, 45.2, 45.3, 45.4, 45.5, 45.6, 45.7, 45.8, 45.9, 46.0, 46.1, 46.2, 46.3, 46.4, 46.5, 46.6, 46.7, 46.8, 46.9, 47.0, 47.1, 47.2, 47.3, 47.4, 47.5, 47.6, 47.7, 47.8, 47.9, 48.0, 48.1, 48.2, 48.3, 48.4, 48.5, 48.6, 48.7, 48.8, 48.9, 49.0, 49.1, 49.2, 49.3, 49.4, 49.5, 49.6, 49.7, 49.8, 49.9, 50.0, 50.1, 50.2, 50.3, 50.4, 50.5, 50.6, 50.7, 50.8, 50.9, 51.0, 51.1, 51.2, 51.3, 51.4, 51.5, 51.6, 51.7, 51.8, 51.9, 52.0, 52.1, 52.2, 52.3, 52.4, 52.5, 52.6, 52.7, 52.8, 52.9, 53.0, 53.1, 53.2, 53.3, 53.4, 53.5, 53.6, 53.7, 53.8, 53.9, 54.0, 54.1, 54.2, 54.3, 54.4, 54.5, 54.6, 54.7, 54.8, 54.9, 55.0, 55.1, 55.2, 55.3, 55.4, 55.5, 55.6, 55.7, 55.8, 55.9, 56.0, 56.1, 56.2, 56.3, 56.4, 56.5, 56.6, 56.7, 56.8, 56.9, 57.0, 57.1, 57.2, 57.3, 57.4, 57.5, 57.6, 57.7, 57.8, 57.9, 58.0, 58.1, 58.2, 58.3, 58.4, 58.5, 58.6, 58.7, 58.8, 58.9, 59.0, 59.1, 59.2, 59.3, 59.4, 59.5, 59.6, 59.7, 59.8, 59.9, 60.0, 60.1, 60.2, 60.3, 60.4, 60.5, 60.6, 60.7, 60.8, 60.9, 61.0, 61.1, 61.2, 61.3, 61.4, 61.5, 61.6, 61.7, 61.8, 61.9, 62.0, 62.1, 62.2, 62.3, 62.4, 62.5, 62.6, 62.7, 62.8, 62.9, 63.0, 63.1, 63.2, 63.3, 63.4, 63.5, 63.6, 63.7, 63.8, 63.9, 64.0, 64.1, 64.2, 64.3, 64.4, 64.5, 64.6, 64.7, 64.8, 64.9, 65.0, 65.1, 65.2, 65.3, 65.4, 65.5, 65.6, 65.7, 65.8, 65.9, 66.0, 66.1, 66.2, 66.3, 66.4, 66.5, 66.6, 66.7, 66.8, 66.9, 67.0, 67.1, 67.2, 67.3, 67.4, 67.5, 67.6, 67.7, 67.8, 67.9, 68.0, 68.1, 68.2, 68.3, 68.4, 68.5, 68.6, 68.7, 68.8, 68.9, 69.0, 69.1, 69.2, 69.3, 69.4,

1000

^a Data were obtained from the following studies: (1) *in vitro* studies by Kuo et al. [1986], (2) *in vivo* studies by Kuo et al. [1987], (3) *in vitro* studies by Kuo et al. [1988], (4) *in vitro* studies by Kuo et al. [1989], (5) *in vitro* studies by Kuo et al. [1990], (6) *in vitro* studies by Kuo et al. [1991], (7) *in vitro* studies by Kuo et al. [1992], (8) *in vitro* studies by Kuo et al. [1993], (9) *in vitro* studies by Kuo et al. [1994], (10) *in vitro* studies by Kuo et al. [1995], (11) *in vitro* studies by Kuo et al. [1996], (12) *in vitro* studies by Kuo et al. [1997], (13) *in vitro* studies by Kuo et al. [1998], (14) *in vitro* studies by Kuo et al. [1999], (15) *in vitro* studies by Kuo et al. [2000], (16) *in vitro* studies by Kuo et al. [2001], (17) *in vitro* studies by Kuo et al. [2002], (18) *in vitro* studies by Kuo et al. [2003], (19) *in vitro* studies by Kuo et al. [2004], (20) *in vitro* studies by Kuo et al. [2005], (21) *in vitro* studies by Kuo et al. [2006], (22) *in vitro* studies by Kuo et al. [2007], (23) *in vitro* studies by Kuo et al. [2008], (24) *in vitro* studies by Kuo et al. [2009], (25) *in vitro* studies by Kuo et al. [2010], (26) *in vitro* studies by Kuo et al. [2011], (27) *in vitro* studies by Kuo et al. [2012], (28) *in vitro* studies by Kuo et al. [2013], (29) *in vitro* studies by Kuo et al. [2014], (30) *in vitro* studies by Kuo et al. [2015], (31) *in vitro* studies by Kuo et al. [2016], (32) *in vitro* studies by Kuo et al. [2017], (33) *in vitro* studies by Kuo et al. [2018], (34) *in vitro* studies by Kuo et al. [2019], (35) *in vitro* studies by Kuo et al. [2020].

	1	2	3	4	5
100	100	100	100	100	100
90	90	90	90	90	90
80	80	80	80	80	80
70	70	70	70	70	70
60	60	60	60	60	60
50	50	50	50	50	50
40	40	40	40	40	40
30	30	30	30	30	30
20	20	20	20	20	20
10	10	10	10	10	10
0	0	0	0	0	0

1990

1. The first group of authors (e.g., *Wallerstein, 1986*) has argued that the family structure in which a child is raised is the most important factor in determining the child's sexual orientation. This view is based on the idea that the family is the primary socialization agent for children, and that the family structure (e.g., single-parent, two-parent, etc.) determines the child's sexual orientation.

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

WORK ORDER

Area or Office Yellowstone National Park		Region MT	No. Date April 13, 1972
The _____ (Organizational Unit) under the supervision of _____ is authorized and requested to proceed with the performance of the work or service described below in accordance with the detail and plan more specifi- cally set forth in the drawing or plan referred to herein.		Fund Symbol 24Y1035	General Ledger Acct. No. Statutory Authority (where necessary) Plan No.
Title and/or Description of Project or Service to be Performed Sanitation Collection Services			POP No. Year Programmed 1973 Est. Starting Date July 1, 1972 Est. Completion Date June 30, 1973
Location of Work Requested 			

ESTIMATE OF COSTS				
Components of Costs	Amount	Work Code	Project Features	Amount
Personal Services	89,320		Quarters 4%	4,920
Rent, Communications and Utilities	100		Reimbursable Sani- tation 50%	61,510
Supplies and Materials	5,500		Sanitation Systems 46%	56,590
Equipment Operation & Depr.	22,000			
Storehouse Operations	5,650			
Shop Operations	450			
TOTAL	123,020		TOTAL	123,020

Distribution of Copies	Remark	
No. TO		
6 MWRO		
1 Admin. Officer		
1 Asst. Supt. OPR	Approved by (Signature, Title, & Date)	ADJUSTMENT NO. 1
1 Files		Allotment Advice No.
Chief of Maint.	Superintendent	Allotment Advice Date
	Regional Office Clearance when Required (Signature, Title, & Date)	Amount for Work Order

If Additional Space is Necessary, Use Reverse in Tumble Fashion

6865 62-

DATE

4-13-72

FISCAL YEAR

1973

FINANCIAL PLAN - OPERATING PROGRAM

AREA OR OFFICE		FINANCE OFFICE		DATE		
Yellowstone National Park		Midwest Region		4-13-72		
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY		FISCAL YEAR		
14X1035 Construction		Sanitation Disposal Svcs.		1973		
ACCOUNT #						
COMPONENTS OF COST BY OBJECT CLASSIFICATION		ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN		
11 & 12 - Personnel Compensation and Benefits (From Form 10-561a)		49,480				
21 - Travel and Transportation of Persons						
22 - Transportation of Things						
23 - Rent, Communications, and Utilities (Includes GSA Office Space Rental \$)						
24 - Printing and Reproduction						
25.1 - Other Services (Itemize on reverse side)		4,800				
25.2 - Services of Other Agencies (Itemize on reverse side)						
26 - Supplies and Materials and Non-Capitalized Equipment (Direct Purchases)		4,800				
31 - Equipment (Capital Acquisitions - Itemize Below)						

32 - Lands and Structures						
41 - Grants, Subsidies, and Contributions						
42 - Insurance Claims and Indemnities						
61 - Depreciation of Equipment						
Equipment Operations		9,000				
Storehouse Operations		13,000				
62 - Corral Operations						
Shop Operations		400				
Manufacturing of Stores and Equipment						
63 - Utility Systems (NPS Operations Only)						
TOTAL AUTHORIZED PLAN		81,480				
DISTRIBUTION		EST. CUMULATIVE OBLIGATIONS BY APPORTIONMENT PERIOD (Quarterly or Tri-Annual)				
NO.	TO	COMPONENTS	FIRST	SECOND	THIRD	FOURTH
		Personal services (11 & 12)	29,700	37,100	45,480	
		All Other Expenses	19,200	24,000	30,000	
		Capital Outlays (31)	-0-	-0-	-0-	
		Total Authorized Plan	48,900	61,100	81,480	
RECOMMENDED (Sig. & Title)		CONCURRED (Sig. & Title)		APPROVED (Sig. & Title)		(Date)
[Signature]		[Signature]		[Signature]		4/13/72

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

NUMERIC CODE
6005 42-14
DATE
4-13-72
FISCAL YEAR
1973
ACCOUNT NUMBER

AREA OR OFFICE		FINANCE OFFICE				FISCAL YEAR	
Yellowstone National Park		Midwest Region				1973	
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY				ACCOUNT NUMBER	
14X1035 Construction		Sanitation Disposal Svcs.					
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN- YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
	Positions other than permanent:						
	Temporary full-time employment:						
	Engr. Equip. Oper., WG-11	Ungr.	1	0.5	4,830		
	Engr. Equip. Oper., WG-10	Ungr.	2	0.9	8,230		
	Engr. Equip. Oper., WG-8	Ungr.	1	0.2	1,810		
	Incinerator Operation, WG-5	Ungr.	5	2.1	16,500		
	Laborer, WG-3	Ungr.	4	1.5	10,790		
	Total other than permanent		13	5.2	42,160		
	Other personnel compensation:						
	Overtime pay				2,020		
	Holiday pay				1,060		
	Sunday differential				1,310		
	Total other personnel compensation				4,390		
	Total personnel compensation				46,550		
	Add Personnel Benefits (6% of above "other than permanent")				2,530		
	Uniform allowance:						
	Temporary				400		
	Total personnel benefits				2,930		
	Total personnel compensation and benefits				49,480		

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL BY COST FEATURE

NUM. INC. SET
6865 12-
DATE
4-13-72
FISCAL YEAR
1973
ACCOUNT NO.

AREA OR OFFICE		FINANCE OFFICE		
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY		
COST ACCOUNT NUMBER	COST FEATURE	ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN
	Yellowstone National Park	Midwest Region		
	14X1035 Construction	Sanitation Disposal Svcs.		
	Total Authorized Plan	81,480		
	Deduct sanitation disposal charges on other Forms 10-561 as follows:			
	Quarters	3,260		
	Reimbursable Sanitation	41,555		
	Sanitation Systems	36,665		
		-0-		

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

WORK ORDER

Area or Office
Yellowstone National Park

Region
MONT

No.
Date April 12, 1972
General Ledger Acct. No.
Fund Symbol 14X1035
Statutory Authority (where necessary)
Plan No.

The _____ (Organizational Unit)
is
under the supervision of _____
authorized and requested to proceed with the performance of the work or
service described below in accordance with the detail and plan more specifi-
cally set forth in the drawing or plan referred to herein.

Title and/or Description of Project or Service to be Performed

Sanitation Disposal Service

Project No.
Year Programmed 1973
Est. Starting Date July 1, 1972
Est. Completion Date June 30, 1973

Location of Work Requested

ESTIMATE OF COSTS				
Components of Costs	Amount	Acct. Code	Project Features	Amount
Personal Services	49,480		Quarters 4%	3,260
Other Services	4,800		Reimbursable Sanitation 51%	41,555
Supplies and Materials	4,800		Sanitation Systems 45%	36,665
Equipment Operations	9,000			
Storehouse Operations	13,000			
Shop Operations	400			
TOTAL	81,480		TOTAL	81,480

Distribution of Copies	Remark	
No. TO		
6 MWRO		
1 Admin Officer		
1 Asst Supt Cnr	Approved by (Signature, Title, & Date)	ADJUSTMENT ACTION
1 Files	Superintendent	Allotment Advice No.
Chief of Maint	Regional Office Clearance when Required (Signature, Title, & Date)	Allotment Advice Date
		Amount for Work Order

FINANCIAL PLAN - OPERATING PROGRAM

DATE
4-13-72

AREA OR OFFICE Yellowstone National Park	FINANCE OFFICE Midwest Region	FISCAL YEAR 1973
APPROPRIATION SYMBOL AND TITLE 14X1035 Construction	ACTIVITY OR SUBACTIVITY Electric System	ACCOUNT NO.

COMPONENTS OF COST BY OBJECT CLASSIFICATION	ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN
11 & 12 - Personnel Compensation and Benefits (From Form 10-561a)			
21 - Travel and Transportation of Persons			
22 - Transportation of Things			
23 - Rent, Communications, and Utilities (Includes GSA Office Space Rental \$)	35,500		
24 - Printing and Reproduction			
25.1 - Other Services (Itemize on reverse side)			
25.2 - Services of Other Agencies (Itemize on reverse side)			
26 - Supplies and Materials and Non-Capitalized Equipment (Direct Purchases)			
31 - Equipment (Capital Acquisitions - Itemize Below) _____ _____ _____			
32 - Lands and Structures			
41 - Grants, Subsidies, and Contributions			
42 - Insurance Claims and Indemnities			
61 - Depreciation of Equipment			
Equipment Operations			
Storehouse Operations			
62 - Corral Operations			
Sign Shop Operations			
Manufacturing of Stores and Equipment			
63 - Utility Systems (NPS Operations Only)			
TOTAL AUTHORIZED PLAN	35,500		

DISTRIBUTION		EST. CUMULATIVE OBLIGATIONS BY APPORTIONMENT PERIOD (Quarterly or Triannual)			
NO.	TO	COMPONENTS	FIRST	SECOND	THIRD
		Personal services (11 & 12)			
		All Other Expenses	21,300	26,625	35,500
		Capital Outlays (31)			
		Total Authorized Plan	21,300	26,625	35,500

RECOMMENDED (Sig. & Title)

(Date) CONCURRED (Sig. & Title)

(Date)

APPROVED (Sig. & Title)

(Date)

[Signature] *[Signature]* 4/21/72

FINANCIAL PLAN - OPERATING PROGRAM

DETAIL BY COST FEATURE

NUMERIC CODE
-6865 / 8-4
DATE
4-13-72
FISCAL YEAR
1973
ACCOUNT NO.

SA OR OFFICE

FINANCE OFFICE

FISCAL YEAR

Yellowstone National Park

Midwest Region

1973

APPROPRIATION SYMBOL AND TITLE

ACTIVITY OR SUBACTIVITY

ACCOUNT NO.

14X1035 Construction

Electric Systems

COST ACCOUNT NUMBER	COST FEATURE	ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN
	Total Authorized Plan	35,500		
	Deduct electrical systems charges on other forms 10-561 as follows:			
	Government Utilities	2,840		
	Government Buildings	8,875		
	Government Buildings	7,100		
	Other Facilities	2,485		
	Reimb. Electric Service	7,100		
	Reimb. Water and Sewer	7,100		
		-0-		

WORK ORDER

No.
Date April 13, 1972
General Ledger Acct. No.
Fund Symbol 14X1035
Statutory Authority (where necessary)
Plan No.

Area or Office Yellowstone National Park	Region MW
The _____ (Organizational Unit) under the supervision of _____ is authorized and requested to proceed with the performance of the work or service described below in accordance with the detail and plan more specifica- lly set forth in the drawing or plan referred to herein.	

Title and/or Description of Project or Service to be Performed Electrical Systems	EXP No.
	Year Programmed 1973
	Est. Starting Date July 1, 1972
	Est. Completion Date June 30, 1973

Location of Work Requested

ESTIMATE OF COSTS				
Components of Costs	Amount	Code	Project Features	Amount
Rent, Communications, and Utilities	35,500		Gov't Utilities 8%	2,840
			Gov't Building 25%	8,875
			Gov't Building 20%	7,100
			Other Facilities 7%	2,485
			Reimbursable Operations:	
			Electric Service 20%	7,100
			Water and Sewer 20%	7,100
TOTAL	35,500		TOTAL	35,500

Distribution of Copies	Remark
No. TO	
Approved by (Signature, Title, & Date)	ALLIANCE WITH
Superintendent	Allotment Advice No.
Regional Office Clearance when Required (Signature, Title, & Date)	Allotment Advice Date
	Amount for Work Order

If Additional Space is Necessary, Use Reverse in Turnable Fashion

FINANCIAL PLAN - OPERATING PROGRAM

AREA OR OFFICE	FINANCE OFFICE	FISCAL YEAR	
Yellowstone National Park, Wyoming	Midwest Region	1973	
APPROPRIATION SYMBOL AND TITLE	ACTIVITY OR SUBACTIVITY	ACCOUNT NO.	
14X1035	Water and Sewer		
COMPONENTS OF COST BY OBJECT CLASSIFICATION	ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN
11 & 12 - Personnel Compensation and Benefits (From Form 10-561a)			
21 - Travel and Transportation of Persons			
22 - Transportation of Things			
23 - Rent, Communications, and Utilities (Includes GSA Office Space Rental \$)			
24 - Printing and Reproduction			
25.1 - Other Services (Itemize on reverse side)			
25.2 - Services of Other Agencies (Itemize on reverse side)			
26 - Supplies and Materials and Non-Capitalized Equipment (Direct Purchases)			
31 - Equipment (Capital Acquisitions - Itemize Below) _____ _____ _____			
32 - Lands and Structures			
41 - Grants, Subsidies, and Contributions			
42 - Insurance Claims and Indemnities			
61 - Depreciation of Equipment Equipment Operations Storehouse Operations			
62 - Corral Operations Sign Shop Operations Manufacturing of Stores and Equipment			
63 - Utility Systems (NPS Operations Only)	110,431		
TOTAL AUTHORIZED PLAN	110,431		

DISTRIBUTION		EST. CUMULATIVE OBLIGATIONS BY APPORTIONMENT PERIOD (Quarterly or Tri-annual)				
NO.	TO	COMPONENTS	FIRST	SECOND	THIRD	FOURTH
		Personal services (11 & 12)				
		All Other Expenses	49,694	71,730	110,431	
		Capital Outlays (31)				
		Total Authorized Plan	49,694	71,730	110,431	

RECOMMENDED (Sig. & Title) (Date) CONCURRED (Sig. & Title) (Date) APPROVED (Sig. & Title) (Date)

 4/21/73

FINANCIAL PLAN - OPERATING PROGRAM

AREA OR OFFICE

Yellowstone National Park, Wyoming

FINANCE OFFICE

Midwest Region

APPROPRIATION SYMBOL AND TITLE

14X1035

ACTIVITY OR SUBACTIVITY

Sanitation Collection

ACCOUNT NO.

COMPONENTS OF COST BY OBJECT CLASSIFICATION	ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN
11 & 12 - Personnel Compensation and Benefits (From Form 10-561a)			
21 - Travel and Transportation of Persons			
22 - Transportation of Things			
23 - Rent, Communications, and Utilities (Includes GSA Office Space Rental \$)			
24 - Printing and Reproduction			
25.1 - Other Services (Itemize on reverse side)			
25.2 - Services of Other Agencies (Itemize on reverse side)			
26 - Supplies and Materials and Non-Capitalized Equipment (Direct Purchases)			
31 - Equipment (Capital Acquisitions - Itemize Below) _____ _____ _____			
32 - Lands and Structures			
41 - Grants, Subsidies, and Contributions			
42 - Insurance Claims and Indemnities			
61 - Depreciation of Equipment Equipment Operations Storehouse Operations			
62 - Corral Operations Sign Shop Operations Manufacturing of Stores and Equipment			
63 - Utility Systems (NPS Operations Only)	66,430		
TOTAL AUTHORIZED PLAN	66,430		

DISTRIBUTION		EST. CUMULATIVE OBLIGATIONS BY APPORTIONMENT PERIOD (Quarterly or Triannual)			
NO.	TO	COMPONENTS	FIRST	SECOND	THIRD
		Personal services (11 & 12)			
		All Other Expenses	29,894	43,180	66,430
		Capital Outlays (31)			
		Total Authorized Plan	29,894	43,180	66,430

RECOMMENDED (Sig. & Title)

(Date)

CONCURRED (Sig. & Title)

(Date)

APPROVED (Sig. & Title)

(Date)

APPROVED (Sig. & Title)

(Date)

4/11/72

FINANCIAL PLAN - OPERATING PROGRAM

AREA OR OFFICE		FINANCE OFFICE		FISCAL YEAR		
Yellowstone National Park, Wyoming		Midwest Region		1973		
APPROPRIATION SYMBOL AND TITLE 14X1035		ACTIVITY OR SUBACTIVITY Sanitation Disposal		ACCOUNT NO.		
COMPONENTS OF COST BY OBJECT CLASSIFICATION		ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN		
11 & 12 - Personnel Compensation and Benefits (From Form 10-561a)						
21 - Travel and Transportation of Persons						
22 - Transportation of Things						
23 - Rent, Communications, and Utilities (Includes GSA Office Space Rental \$)						
24 - Printing and Reproduction						
25.1 - Other Services (Itemize on reverse side)						
25.2 - Services of Other Agencies (Itemize on reverse side)						
26 - Supplies and Materials and Non-Capitalized Equipment (Direct Purchases)						
31 - Equipment (Capital Acquisitions - Itemize Below) _____ _____ _____						
32 - Lands and Structures						
41 - Grants, Subsidies, and Contributions						
42 - Insurance Claims and Indemnities						
61 - Depreciation of Equipment						
62 - Equipment Operations						
Storehouse Operations						
Corral Operations						
Sign Shop Operations						
Manufacturing of Stores and Equipment						
63 - Utility Systems (NPS Operations Only)		44,815				
TOTAL AUTHORIZED PLAN		44,815				
DISTRIBUTION		EST. CUMULATIVE OBLIGATIONS BY APPORTIONMENT PERIOD (Quarterly or Tri-annual)				
NO.	TO	COMPONENTS	FIRST	SECOND	THIRD	FOURTH
		Personal services (11 & 12)				
		All Other Expenses	20,167	29,130	44,815	
		Capital Outlays (31)				
		Total Authorized Plan	20,167	29,130	44,815	
RECOMMENDED (Sig. & Title) (Date)		CONCURRED (Sig. & Title) (Date)		APPROVED (Sig. & Title) (Date)		
[Signature]		[Signature] 4/6/78		[Signature]		

FINANCIAL PLAN - OPERATING PROGRAM

AREA OR OFFICE		FINANCE OFFICE		FISCAL YEAR	
Yellowstone National Park, Wyoming		Midwest Region		1971	
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY		ACCOUNT	
14X1035		Electrical Systems			
COMPONENTS OF COST BY OBJECT CLASSIFICATION		ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT	
11 & 12 - Personnel Compensation and Benefits (From Form 10-561a)					
21 - Travel and Transportation of Persons					
22 - Transportation of Things					
23 - Rent, Communications, and Utilities (Includes GSA Office Space Rental \$)					
24 - Printing and Reproduction					
25.1 - Other Services (Itemize on reverse side)					
25.2 - Services of Other Agencies (Itemize on reverse side)					
26 - Supplies and Materials and Non-Capitalized Equipment (Direct Purchases)					
31 - Equipment (Capital Acquisitions - Itemize Below)					
32 - Lands and Structures					
41 - Grants, Subsidies, and Contributions					
42 - Insurance Claims and Indemnities					
61 - Depreciation of Equipment					
Equipment Operations					
Storehouse Operations					
62 - Corral Operations					
Sign Shop Operations					
Manufacturing of Stores and Equipment					
63 - Utility Systems (NPS Operations Only)		14,200			
TOTAL AUTHORIZED PLAN		14,200			
DISTRIBUTION		EST. CUMULATIVE OBLIGATIONS BY APPOINTMENT PERIOD (Quarterly or Tri-)			
NO.	TO	COMPONENTS	FIRST	SECOND	THIRD
		Personal services (11 & 12)			
		All Other Expenses	6,390	9,230	14,200
		Capital Outlays (31)			
		Total Authorized Plan	6,390	9,230	14,200
RECOMMENDED (Sig. & Title)		CONCURRED (Sig. & Title)		APPROVED (Sig. & Title)	

6273

DATE

4-21-72

FINANCIAL PLAN - OPERATING PROGRAM

AREA OR OFFICE		FINANCE OFFICE		FISCAL YEAR		
Yellowstone National Park		Midwest Region		1973		
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY		ACCOUNT NO.		
14X1035 Construction		Reimbursements from other Federal Agencies				
COMPONENTS OF COST BY OBJECT CLASSIFICATION		ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN		
11 & 12 - Personnel Compensation and Benefits (From Form 10-561a)						
21 - Travel and Transportation of Persons						
22 - Transportation of Things						
23 - Rent, Communications, and Utilities (Includes GSA Office Space Rental \$)						
24 - Printing and Reproduction						
25.1 - Other Services (Itemize on reverse side)						
25.2 - Services of Other Agencies (Itemize on reverse side)						
26 - Supplies and Materials and Non-Capitalized Equipment (Direct Purchases)						
31 - Equipment (Capital Acquisitions - Itemize Below)						

32 - Lands and Structures						
41 - Grants, Subsidies, and Contributions						
42 - Insurance Claims and Indemnities						
61 - Depreciation of Equipment						
Equipment Operations		20,679				
Storehouse Operations		6,086				
62 - Corral Operations		463				
Sign Shop Operations						
Manufacturing of Stores and Equipment						
63 - Utility Systems (NPS Operations Only)						
TOTAL AUTHORIZED PLAN		27,228				
DISTRIBUTION		EST. CUMULATIVE OBLIGATIONS BY APPORTIONMENT PERIOD (Quarterly or Triannual)				
NO.	TO	COMPONENTS	FIRST	SECOND	THIRD	FOURTH
		Personal services (11 & 12)				
		All Other Expenses	9,076	18,152	27,228	
		Capital Outlays (31)				
		Total Authorized Plan	9,076	18,152	27,228	
RECOMMENDED (SIR & Title)		CONCURRED (SIR & Title)		APPROVED (SIR & Title)		(Date)
J. D. [Signature]		J. D. [Signature]		J. D. [Signature]		

FINANCIAL PLAN - OPERATING PROGRAM

DETAIL BY COST FEATURE

NUMERIC CODE

68-3

DATE

4-21-72

FISCAL YEAR

1973

ACCOUNT NO.

A OR OFFICE

Yellowstone National Park

FINANCE OFFICE

Midwest Region

APPROPRIATION SYMBOL AND TITLE

14X1035 Construction

Reimbursement from other
Federal Agencies

COST ACCOUNT NUMBER	COST FEATURE	ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN
	TOTAL AUTHORIZED PLAN	27,228		
	Deduct income from other Federal Agencies (General Services Admini- stration, Post Office Department, Bureau of Public Roads, Sports Fisheries and Wildlife, etc.)	27,228		
	TOTAL	-()-		

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL BY COST FEATURE

NUMERIC CODE

6873

DATE

4-21-72

FISCAL YEAR

1973

ACCOUNT NO

AREA OR OFFICE

Yellowstone National Park

FINANCE OFFICE

Midwest Region

APPROPRIATION SYMBOL AND TITLE

14X1035 Construction

ACTIVITY OR SUBACTIVITY

Reimbursements (Consolidated)

COST ACCOUNT NUMBER	COST FEATURE	ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN
	TOTAL AUTHORIZED PLAN:	422,824		
	Deduct reimbursable charges Scheduled on other Forms 10-561 as follows:			
	Buildings and Utilities	160,000		
	Quarters	15,000		
	Water & Sewer Clearing	110,431		
	Sanitation Clearing	103,065		
	Electric Clearing	7,100		
	Other Federal Agencies	27,228		
	TOTAL	- 0 -		

FINANCIAL PLAN - OPERATING PROGRAM

AREA OR OFFICE		FINANCE OFFICE		ACCOUNT NO.	
Yellowstone National Park		Midwest Region			
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY			
14X1035 Construction		Otrs. Oper.			
COMPONENTS OF COST BY OBJECT CLASSIFICATION		ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN	
11 & 12 - Personnel Compensation and Benefits (From Form 10-561a)		94,360			
21 - Travel and Transportation of Persons		100			
22 - Transportation of Things		350			
23 - Rent, Communications, and Utilities (Includes GSA Office Space Rental \$)		10,000			
24 - Printing and Reproduction		---			
25.1 - Other Services (Itemize on reverse side)		7,350			
25.2 - Services of Other Agencies (Itemize on reverse side)		---			
26 - Supplies and Materials and Non-Capitalized Equipment (Direct Purchases)		17,157			
31 - Equipment (Capital Acquisitions - Itemize Below)					
10-Refrigerators @ 160					
10-Ranges @ 100					
10-Water Heaters @ 100		3,600			
32 - Lands and Structures		---			
41 - Grants, Subsidies, and Contributions		---			
42 - Insurance Claims and Indemnities		---			
61 - Depreciation of Equipment		---			
Equipment Operations		1,500			
Storehouse Operations		40,733			
62 - Corral Operations		---			
STGS Shop Operations		100			
Manufacturing of Stores and Equipment					
63 - Utility Systems (NPS Operations Only)		15,000			
TOTAL AUTHORIZED PLAN		190,250			

DISTRIBUTION		EST. CUMULATIVE OBLIGATIONS BY APPORTIONMENT PERIOD (Quarterly or Triannual)				
NO.	TO	COMPONENTS	FIRST	SECOND	THIRD	FOURTH
		Personal services (11 & 12)	9,610	67,250	11,350	
		All Other Expenses	9,415	62,350	11,250	
		Capital Outlays (31)	---	3,600	3,600	
		Total Authorized Plan	19,025	133,250	190,250	

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS
 NUMERIC CODE
 6865 68-11
 DATE
 4-13-73
 FISCAL YEAR
 1973

AREA OR OFFICE		FINANCIAL OFFICE				FISCAL YEAR	
Yellowstone National Park		Midwest Region				1973	
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY				ACCOUNT NUMBER	
14X1035 Construction		Quarters Operation					
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN- YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
	Permanent full-time positions:						
6865-59	Pipefitter (Brummond)	Ungr	1		9,090		
6865-81	Maintenance Foreman (Oaks)	Ungr	1		11,814		
	Total Permanent		2	2.0	20,904		
	Deduct portion of salaries shown above paid from other accounts:						
	Buildings and Utilities			-0.9	-9,271		
	Water and Sewer			-0.7	-5,100		
	Add portion of salaries carried in other schedules paid from this account:						
	Buildings and Utilities			1.3	12,469		
	Adjusted Total Permanent			1.7	19,002		
	Positions other than permanent:						
	Maintenance Foreman, WS-10	Ungr	1	0.3	3,560		
	Maintenance Worker, WG-5	Ungr	1	0.9	7,040		
	Boiler Plant Opr., WG-6	Ungr	1	0.9	7,260		
	Carpenter, WG-9	Ungr	3	2.1	18,520		
	Electrician, WG-10	Ungr	1	0.8	7,270		
	Painter, WG-9	Ungr	2	1.1	9,700		
	Pipefitter, WG-10	Ungr	1	0.7	6,360		
	Laborer, WG-3	Ungr	1	0.3	2,030		
	Carpenter Helper, WG-5	Ungr	1	0.5	3,630		
	Pipefitter Helper, WG-5	Ungr	1	0.2	1,450		
	Electrical Helper, WG-5	Ungr	1	0.2	1,450		
	Total Other than Permanent		14	8.0	68,270		
	Other personnel Compensation:						
	Overtime pay				150		
	Holiday Pay				200		
	Night work differential				200		
	Sunday differential				90		
	Total other personnel compensation				640		
	Total personnel compensation				87,912		
	Add Personnel Benefits:						
	(10% of "not permanent")				1,900		
	(6% of "other than perm")				4,008		

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

NUMERIC CODE

-6865 62-11

DATE _____

4-13-72

FISCAL YEAR

1973

ACCOUNT NUMBER

[illegible]

APPORTIONMENT AND REAPPORTIONMENT SCHEDULE

AGENCY Department of the Interior <hr/> BUREAU National Park Service	APPROPRIATION OR FUND TITLE AND SYMBOL 14X5063 Educational Expenses, Children Employees, Yellowstone National Park, National Park Service		
DESCRIPTION	AMOUNT ON LATEST S. F. 132	AGENCY REQUEST	ACTION BY OMB
BUDGETARY RESOURCES			
1. Budget authority:			
A. Appropriations realized.....		313,000	
B. Appropriations anticipated (indefinite).....			
C. Other new authority (.....)			
D. Net transfers (+ or -).....			
2. Unobligated balance:			
A. Brought forward July 1.....			
B. Net transfers (+ or -).....			
3. Reimbursements and other income:			
A. Earned.....			
B. Change in unfilled customers' orders (+ or -).....			
C. Anticipated for rest of year.....			
4. Recoveries of prior obligations:			
A. Actual.....			
B. Anticipated for rest of year.....			
5. Portion not available this year pursuant to P.L. _____ (-)			
6. Restorations (+) and writeoffs (-).....			
7. TOTAL BUDGETARY RESOURCES.....		313,000	
APPLICATION OF BUDGETARY RESOURCES			
8. Apportionments:	<i>Memorandum: Obligations incurred</i>		
Category A:			
(1) First quarter.....		43,500	43,500
(2) Second quarter.....		76,300	76,300
(3) Third quarter.....		69,900	69,900
(4) Fourth quarter.....		123,300	123,300
Category B:			
(1).....			
(2).....			
(3).....			
(4).....			
9. Reserves:			
A. For contingencies.....			
B. For savings.....			
C. For subsequent apportionment.....			
10. Unapportioned balance of revolving fund.....			
11. TOTAL BUDGETARY RESOURCES.....		313,000	313,000
(See reverse)			
SUBMITTED: (Sgd) Angelo C. Ganna (Authorized officer) Acting Director of Budget		APPORTIONED: /s/ W. K. Sasaki Acting Chief, Natural Resources Programs Division	

JUN 2 1972
(Date)

The Act approved June 4, 1948 (62 Stat. 338) authorizes the Secretary of the Interior to make payments in advance or otherwise from any revenue received from the collection of visitor fees to the Park, for providing educational facilities to pupils who are dependents of persons engaged in the administration, operation, and maintenance of Yellowstone National Park.

62-3

DATE

4-21-72

FINANCIAL PLAN - OPERATING PROGRAM

AREA OR OFFICE		FINANCE OFFICE		FISCAL YEAR		
Yellowstone National Park		Midwest Region		1973		
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY		ACCOUNT NO.		
14X5663 Children of Employees, Yellowstone		Educational Expenses				
COMPONENTS OF COST BY OBJECT CLASSIFICATION		ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN		
11 & 12 - Personnel Compensation and Benefits (From Form 10-561a)		13,345				
21 - Travel and Transportation of Persons						
22 - Transportation of Things						
23 - Rent, Communications, and Utilities (Includes GSA Office Space Rental \$)		3,000				
24 - Printing and Reproduction						
25.1 - Other Services (Itemize on reverse side)		204,183				
25.2 - Services of Other Agencies (Itemize on reverse side)						
26 - Supplies and Materials and Non-Capitalized Equipment (Direct Purchases)		1,662				
31 - Equipment (Capital Acquisitions - Itemize Below)						
32 - Lands and Structures						
41 - Grants, Subsidies, and Contributions						
42 - Insurance Claims and Indemnities						
61 - Depreciation of Equipment						
Equipment Operations		500				
Storehouse Operations		2,500				
62 - Corral Operations						
Shop Operations						
Manufacturing of Stores and Equipment						
64 Facilitating Service						
- XXXXXXXXXXXXXXXXXXXXXXXX		11,210				
TOTAL AUTHORIZED PLAN		235,400				
DISTRIBUTION		EST. CUMULATIVE OBLIGATIONS BY APPORTIONMENT PERIOD (Quarterly or 1/2 annual)				
NO.	TO	COMPONENTS	FIRST	SECOND	THIRD	FOURTH
1	MWRO (Original)	Personal services (11 & 12)	4,483	6,725	8,967	13,345
1	Admin. Officer	All Other Expenses	39,036	113,111	180,713	222,053
1	Asst. Supt. (OPR)	Capital Outlays (31)	-	-	-	-
1	F.P.S.					
1	Files	Total Authorized Plan	43,519	119,836	189,685	235,400
RECOMMENDED (Sig. & Title)		(Date)	CONCURRED (Sig. & Title)		(Date)	
Kent J. White			ACTING Superintendent			
Administrative Officer						



AMERICAN INDIAN SCHOOLS

25.1	Mammoth, Yellowstone National Park School Dist. No. 1	\$66,133
	West Yellowstone School District No. 69	2,500
	Gardiner, Montana School Districts No. 4 & 7	75,857
	Reserve for unforeseen contingencies	39,028
	Mammoth, Yellowstone National Park School	
	Honeywell contract	255
	Interior decoration, refinishing floors, replacement of hot water tank, etc.	3,200
	Major repair of entire roof of school building	3,300
	Replace condensate pumps, repair burner, replace boiler controls and heat convector controls and valves, and overhaul air compressor associated with heating plant	1,700
	Replace sprinkler heads and stand pipes in under ground sprinkling system	800
	Replace and/or repair of student desks and related equipment	10,910
	Rug and drapery cleaning contract	500
		\$204,183

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

NUMERIC CODE

6273

DATE

4-21-72

FISCAL YEAR

1973

AREA OR OFFICE

Yellowstone National Park

FINANCE OFFICE

Midwest Region

APPROPRIATION SYMBOL AND TITLE Educ. Expenses

ACTIVITY OR SUBACTIVITY

ACCOUNT NUMBER

14X5663 Children of Employees, Yellowstone

Educational Expenses

POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN- YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
	Positions other than permanent:						
	Temporary full-time positions:						
	Boiler Plant Operation WG 6	Ungr.	1	0.7	6,210		
	Maintenance Worker WG 5	Ungr.	1	0.7	5,790		
	Total other than permanent		2	1.4	12,000		
	Other Personnel Compensation:						
	Night Differential				320		
	Sunday Pay				180		
	Holiday				50		
	Total other personnel compensation				550		
	Total personnel compensation				12,550		
	Add personal benefits:						
	6% of "other than permanent"				720		
	Uniform Allowance:						
	Temporary				75		
	Total personal benefits				795		
	Total personnel compensation and benefits				13,345		

A P P E N D I X I I I

P H O T O G R A P H S



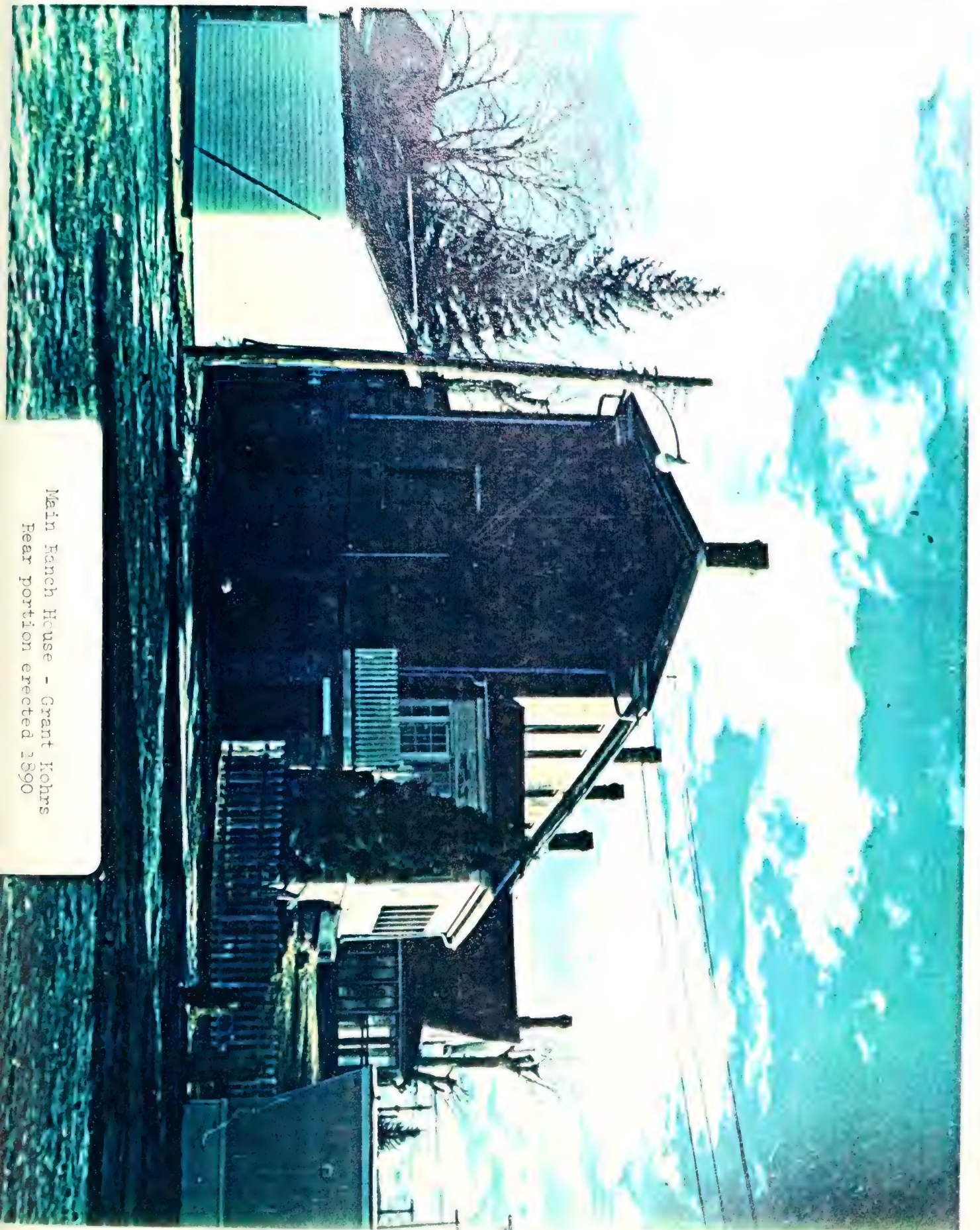
Surrounding Countryside and
Outbuildings of Grant Kohns Ranch,
Deer Lodge, Montana, erected in



Main Ranch House - Grant Kohrs
Front portion erected 1870








Main Ranch House - Grant Kohrs
Fear portion erected 1890





One of the many artifacts used by
the Kohrs Family and donated by
Mr. and Mrs. Conrad Warren



Ranger Drill Team from
Yosemite National Park
Second World Conference
September, 1972



First Lady Greeting Yellowstone
Volunteers-In-Parks
Second World Conference
September 1972

1973

A N N U A L R E P O R T

of the

S U P E R I N T E N D E N T

Y E L L O W S T O N E N A T I O N A L P A R K

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YELLOWSTONE
NATIONAL PARK
LIBRARY

9301



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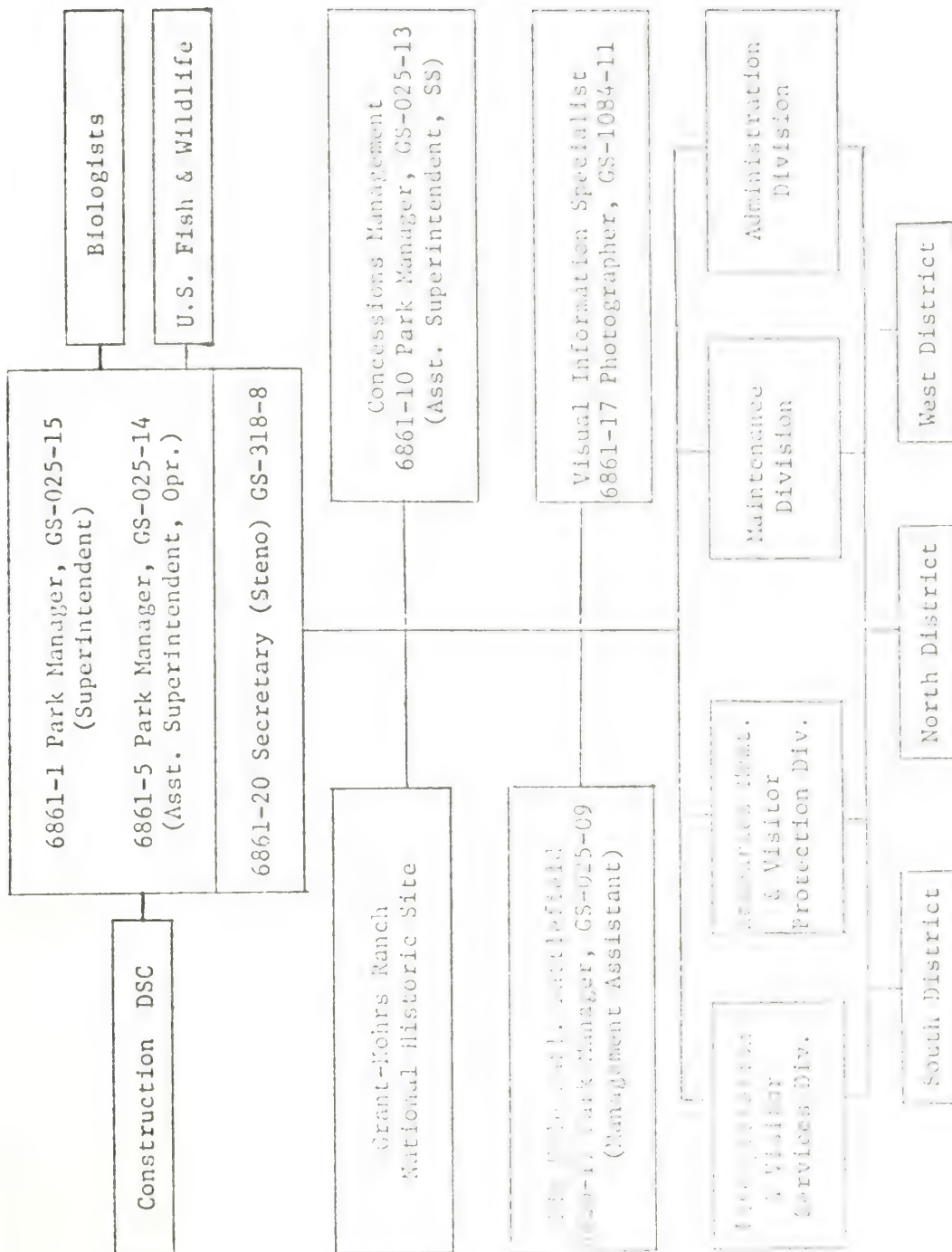
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Photographs - William S. Keller

YELLOWSTONE NATIONAL PARK
Organizational Chart
December 1973

104 Permanent Positions
Plus
2 Regional Safety Positions



I. ADMINISTRATION

A. Personnel

During 1973, 208 employees attended formal training courses for a total of 731 training days; 4 Civil Service Commission courses presented on site by the Denver Regional Training Center of the Commission.

An unprecedented number of employees (9) retired during the year as a result of the new retirement law and cost-of-living bonuses.

B. Awards

Six Special Achievement awards for a total value of \$1,150; 1 Superior Service award, and 5 Incentive awards for a value of \$435 were made. (See Appendix I for breakdown of Special Achievement and Superior Service awards.)

C. Union Management

Labor/Management relationships have been excellent. Monthly meetings have resulted in a close working relationship--resolving possible problems before they became complex.

D. Budget and Finance

(See Appendix II-V for approved copies of Financial Operating Program.)

App. II Park Management
App. III Reimbursable Accounts
App. IV Recreation Fee Collection Expenses
App. V Educational Expenses

E. Concessions

1. Yellowstone Park Company

Through travel in the park all year long this year, concessioners showed a general increase in business, which we feel is an indication that the visitor is staying in the park longer than he has in the past.

The Yellowstone Park Company, continuing its improvement program by removing all its cabins on the trail. This project was started last year and completed this year.

The Company has also obtained approval to continue operation of the Fishing Bridge Cabins after some major renovation. Construction on this project will begin next spring, as soon as snow conditions permit.

The Company has expanded its winter operations at Old Faithful by winterizing 20 cabin units immediately adjacent to the Snow Lodge for winter occupancy and by converting the burned-out laundry building to a fast-food-service facility. It also replaced the bunk beds in the Snow Lodge with single beds. The addition of the cabins raises the pillow count to 180.

The Company took a giant step toward environmental improvement last spring by discontinuing the use of roadside billboards for advertising.

2. Hamilton Stores, Incorporated

Hamilton Stores had no major changes in operations or development this year. Their business trend also showed an increase over the previous year.

3. Yellowstone Park Service Stations

In spite of the threatened gasoline shortage, the Yellowstone Park Service Stations had no difficulty supplying the visitor with fuel in the park. Their gross sales were also increased over the previous year.

E. Concessions (Continued)

3. Yellowstone Park Service Stations (Continued)

Winter activities in the park each year make additional demands on the concessioners. This winter, kerosene premix fuel was made available at the Mammoth Terraces, in addition to its being available at Old Faithful.

New regulations under the Occupational Safety and Health Act are forcing the service stations within the park to discontinue a valuable service to the visitor. Coin-operated gasoline dispensing machines can no longer be used unless a qualified attendant is on duty. The machines provide a much-needed service to the visitor during the early and late seasons and after hours.

4. Yellowstone National Park Medical Services

On July 1, Dr. Fox, resident doctor at Mammoth, resigned his position with the Yellowstone National Park Medical Service to establish a practice in Bozeman. The Medical Service has not filled the position on a permanent basis yet, but is filling in with doctors on a temporary basis. The Medical Service has applied to the National Park Service for an amendment to the present contract which would guarantee the doctors \$40,000 over and above the operating cost of the operation. A decision on this request is still pending.

Yellowstone National Park, Wyoming
December 31, 1973

EMPLOYEE	GRADE	TITLE	TYPE OF AWARD	AMOUNT OF AWARD	NOMINATED	AWARDED
Richard C. Miller	Retired (GS-12)	Personnel Officer	Superior Service	-	01-11-73	01-30-73
Charles A. Mikolich	WG-08	Signmaker	Special Achievement	\$200	03-21-73	04-04-73
Mack R. McCrocklin	WG-09	Carpenter	Special Achievement	\$200	03-21-73	04-04-73
William E. Brummond	WS-04	Trails Foreman	Special Achievement	\$150	06-25-73	08-23-73
Bluford O. Evans	WS-07	Road Foreman	Special Achievement	\$150	06-25-73	08-23-73
Helmer Jensen	WG-11	Engineering Equipment Operator	Special Achievement	\$150	06-25-73	08-23-73
Merna F. Winters	GS-06	Safety Asst.	Special Achievement	\$300	06-13-73	10-10-73

YELLOWSTONE NATIONAL PARK

FINANCIAL PLAN - OPERATING PROGRAM

Fiscal Year 1974

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

2ND QUARTER 1972
6860-7-70
DATE

FINANCIAL PLAN - OPERATING PROGRAM

AGENCY OR OFFICE Yellowstone National Park	FINANCIAL OFFICE Midwest Region	DATE 12/11/72
APPROPRIATION SYMBOL AND TITLE 41036 Operation of NPS	ACTIVITY OR SUBACTIVITY Park Management	FISCAL YEAR 1972

COMPONENTS OF COST BY OBJECT CLASSIFICATION	ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN
12- Personnel Compensation and Benefits (From Form 10-561a)	3,531,302	16,323	3,547,625
- Travel and Transportation of Persons	42,331		42,331
- Transportation of Things	20,356		20,356
- Rent, Communications, and Utilities (Includes GSA Office Space Rental \$)	149,819		149,819
- Printing and Reproduction	4,800		4,800
- Other Services (Itemize on reverse side)	774,460		774,460
- Services of Other Agencies (Itemize on reverse side)			
- Supplies and Materials and Non-Capitalized Equipment (Direct Purchases)	311,506	2,477	313,983
- Equipment (Capital Acquisitions - Itemize Below)			
Equipment per attached list 87,260			
Depreciation 6,557			
	93,926		93,926
- Lands and Structures			
- Grants, Subsidies, and Contributions			
- Insurance Claims and Indemnities			
- Depreciation of Equipment			
Equipment Operations			
Storehouse Operations			
- Corral Operations			
Sign Shop Operations			
Manufacturing of Stores and Equipment			
- Utility Systems (NPS Operations Only)			

TOTAL AUTHORIZED PLAN 4,928,500 + 18,800 4,947,300

DISTRIBUTION TO	EST. CUMULATIVE OBLIGATIONS BY APPORTIONMENT PERIOD	FIRST	SECOND	THIRD
Personal services (11 & 12) . . .				
All Other Expenses				
Capital Outlays (31)				
Total Authorized Plan				

PREPARED BY (Name & Title) (Date) REVIEWED BY (Name & Title) (Date)
Budget Analyst 12/11/72 Regional Budget Officer Regional Director

Yellowstone National Park

Operation of the National Park System

Fiscal Year 1974

25.1 Other Services

Xerox copy service	\$ 8,716
IBM service contract	290
Maintenance of Office Machines & Equipment	4,280
Maintenance of Photographic Equipment	700
Helicopter rental contract	38,150
Fixed wing airplane rental (Gallatin Flying Service)	9,312
Contract with West Yellowstone Interagency Fire Center	12,000
Western Union Telegraph & Teletype service	250
Industrial Towel Service	2,350
Livingston Laundry Service	2,500
U. S. Civil Service Commission training	2,000
Training by Other Agencies	1,200
Graduate Studies:	6,000
Eagle/Osprey	\$ 5,000
Cutthroat/Grayling	\$ 1,000
Gallatin Cooperative Agreement	4,000
Contract to present environmental programs in large cities during winter season	1,500
Contract with professional archivist to organize park's historical archives	8,000
Support NPS television station in West Yellowstone	7,000
Fee collection agreement with Yellowstone Park Company (tour buses, etc.)	900
Horse shoeing contract	1,300
Winter pasture for NPS horses and mules	2,000
Veterinarian services	150
Repairs to heavy equipment and motorized equipment (radiators, engine overhaul, frame repairs, etc.)	5,782
Shop, Storehouse, Corral and other reimbursable clearing operations	465,511
Repairs to tools and work equipment such as pumps, motors, etc.	6,000
Petrolane Yellowstone Gas Service	3,000
Minneapolis-Honeywell Service contract	1,500
Garbage collection and disposal agreements for BIHO and G-K	1,169
Fire protection agreement with City of Deer Lodge, Montana	200
Service center design work and related costs for G-K	1,000
Repairs to equipment, service jobs, cleaning, etc. for BIHO	1,000
Laboratory work, Montana State University.	1,500
Utility Operations	175,200
	<hr/>
	774,460

Yellowstone National Park

Operation of the National Park System

Fiscal Year 1974

31 Equipment

Gas scope tester	\$ 400
Office furniture, desks, cabinets, etc., NIMO	2,300
House trailer for use as quarters	7,000
Pickup truck for G-K	2,300
Sedan for G-K	2,300
Double snow machine trailer	250
Double horse trailer	1,000
Replacement of obsolete cameras	750
Patrol Boat for use on Yellowstone Lake	7,500
Snowmobiles for use with winter operations	4,400
Five sets of radio equipment	5,000
Three ranger patrol and pursuit vehicles	7,200
SCUBA diving equipment	1,500
Fire truck for use in Lake area	11,000
2 ½-ton pickups for R&T use	5,000
2 ½-ton pickups for use by B&U crews	5,000
1 pickup with utility bed for B&U use	4,000
5 horses @ \$225 each	1,124
2 mules @ 300 each	600
Manual typewriters (6)	1,800
Calculators (2)	1,150
Adding machine	200
3-M copy machine	950
Gestetner paper folder for mails and files and information dispatch group	500
General corporation binding machine	300
2 Norelco tape recorders	200
Air conditioners (5)	1,000
Miscellaneous office equipment	5,745
Miscellaneous shop tools such as drills, pneumatic hammers, etc.	1,000
Metal lathe for equipment repair shop	5,000
Spotting scope	200
Binoculars	200
Cameras	500

\$ 87,369

FINANCIAL PLAN - OPERATING PROGRAM

DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

AGENCY OFFICE		PERSONNEL OFFICE				FISCAL YEAR	
Lewistown National Park		National Park Service				1974	
APPROPRIATION SYMBOL AND TITLE		ACTIVITY SYMBOL AND TITLE				ACCOUNT NUMBER	
Operation of the National Park System		Personnel Management					
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	RATE \$	PERSONNEL PLAN	NET PAY OF CHIEF	CURRENT PLAN
Permanent full-time positions:							
61-01	Park Manager (Anderson)	15/7	1	1.0	32,287		32,287
61-05	Park Manager (Baraden)	14/6	1	1.0	26,982		26,982
61-10	Park Manager (Hornesay)	13/7	1	1.0	23,442		23,442
61-02	Admin. Officer (Williams)	13/10	1	1.0	25,613		25,613
61-06	Personnel Officer (Glass)	12/4	1	1.0	18,356		18,356
61-15	Management Asst. (Chadwell)	12/1	1	1.0	16,482		16,482
61-20	Secretary (DeRossi)	8/4	1	1.0	11,591		11,591
61-21	Fin. Prog. Spec. (Walisch)	11/7	1	1.0	16,792		16,792
61-28	Asst. Personnel Officer (Chamberlin)	10/4	1	1.0	14,053		14,053
61-33	Procurement Agent (Ludwig)	9/3	1	1.0	12,343		12,343
61-35	Supv. Supply Tech. (Wolfe)	7/6	1	1.0	11,422		11,422
61-41	Gen. Supply Asst. (Atwood)	9/5	1	1.0	13,162		13,162
61-44	Office Services Supv. (Senz)	6/2	1	1.0	8,858		8,858
61-57	Secretary-Steno (Gwin)	5/6	1	1.0	8,979		8,979
61-61	Administrative Asst. (Anderson)	7/2	1	1.0	9,837		9,837
61-66	Payroll Clerk (Gard.) (Harne)	5/3	1	1.0	8,203		8,203
61-93	File Clerk (Thompson)	4/5	1	1.0	7,798		7,798
61-25	Supv. Res. Biologist (Cole)	14/5	1	1.0	26,163		26,163
61-30	Research Biologist (Barnore)	12/5	1	1.0	18,906		18,906
61-32	Wildlife Biologist (Knight)	13/1	1	1.0	19,700		19,700
61-35	Research Biologist (Houston)	12/5	1	1.0	18,906		18,906
61-45	Research Biologist (Magher)	11/4	1	1.0	15,394		15,394
61-47	Research Biologist (Daspain)	11/3	1	1.0	14,928		14,928
61-50	Wildlife Research Clerk (Kurtz)	6/7	1	1.0	10,283		10,283
71-16	Regional Safety Off. (Miller)	12/2	1	1.0	17,238		17,238
71-55	Safety Assistant (Winters)	6/2	1	1.0	8,858		8,858
61-17	Photographer (Keller)	11/4	1	1.0	15,394		15,394
60-17	Park Manager (Schulmeyer)	9/5	1	1.0	13,162		13,162
90-01	Management Asst. (Vacant)	12/1	1	1.0	16,682		16,682
90-02	Historian (Vacant)	11/1	1	1.0	13,996		13,996
63-01	Supv. Park Ranger (Mabane)	13/5	1	1.0	22,328		22,328
63-05	Supv. Park Ranger (Canter)	12/6	1	1.0	19,462		19,462
63-30	Secretary - Steno (Dupain)	5/7	1	1.0	9,236		9,236
63-35	Supv. Park Ranger (Halladay)	11/2	1	1.0	14,462		14,462
63-40	Supv. Park Ranger (Stockert)	11/3	1	1.0	14,928		14,928
63-42	Park Ranger (Woody)	9/3	1	1.0	12,353		12,353
64-01	Supv. Park Ranger (Estey)	13/6	1	1.0	22,935		22,935
64-03	Supv. Park Ranger (Duckmell)	12/4	1	1.0	18,350		18,350
64-10	Supv. Park Ranger (Sellers)	12/5	1	1.0	18,906		18,906
64-20	Supv. Park Ranger (Phillips)	12/2	1	1.0	17,228		17,228
64-20	Supv. Park Ranger (Orgill)	9/4	1	1.0	12,775		12,775
64-35	Park Technician (Frotto)	9/2	1	1.0	12,001		12,001
64-45	Supv. Park Ranger (Susong)	9/7	1	1.0	13,936		13,936
64-47	Supv. Park Ranger (Miller)	9/3	1	1.0	12,353		12,353

FINANCIAL PLAN - OPERATING PROGRAM

DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

NUMERIC CODE
6860-6890
DATE
10/16/73
FISCAL YEAR
1974
ACCOUNT NUMBER

AGENCY OFFICE		FINANCIAL OFFICE			FISCAL YEAR		
Houston, Texas		Midwest Region			1974		
Appropriation		ACTIVITY OR SUBACTIVITY			ACCOUNT NUMBER		
Operation of the National Park System		Park Management					
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO	MAN-YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
4-50	Park Ranger (Vacant)	7/1	1	1.0	9,520		9,520
4-52	Park Ranger (Vacant)	7/1	1	1.0	9,520		9,520
4-54	Park Ranger (Vacant)	7/3	1	1.0	10,154		10,154
4-60	Secretary - State (Origer)	6/5	1	1.0	9,716		9,716
4-66	Park Ranger (Vacant)	7/3	1	1.0	10,154		10,154
4-72	Supv. Park Ranger (Williamson)	11/6	1	1.0	16,326		16,326
4-80	Supv. Park Ranger (Vacant)	9/1	1	1.0	11,614		11,614
4-84	Supv. Park Ranger (Guss)	11/8	1	1.0	17,258		17,258
4-98	Supv. Park Ranger (Scott)	11/5	1	1.0	15,860		15,860
4-49	Supv. Park Ranger (Danforth) RF	9/5		.7	9,213		9,213
4-59	Supv. Park Ranger (Vacant) RF	9/1		.8	9,291		9,291
4-76	Supv. Park Ranger (Hurt) RF	9/4		.8	10,220		10,220
4-78	Supv. Park Ranger (Olsen) RF	9/1		.8	9,291		9,291
4-86	Supv. Park Ranger (Nash) RF	9/3		.8	9,910		9,910
4-88	Supv. Park Ranger (Marnie) RF	9/7		.7	9,755		9,755
4-90	Supv. Park Ranger (Johnson) RF	9/4		.7	8,943		8,943
4-96	Supv. Park Ranger (Vacant) RF	9/1		.4	4,646		4,646
4-74	Supv. Park Ranger (Dodge) RF	9/5		.7	9,213		9,213
4-51	Supv. Park Ranger (Matterson) RF	9/1		.8	9,291		9,291
4-99	Fire Control Tech. (Black)	7/5	1	1.0	10,788		10,788
4-62	Fire Control Tech. (Tracy)	7/7	1	1.0	11,422		11,422
4-50	Park Ranger	7/1	D	.6		9,520	9,520
4-52	Park Ranger	7/1	D	.6		9,520	9,520
4-54	Park Ranger	7/1	D	.6		9,520	9,520
5-01	Supv. Civil Engr. (Nordgren)	12/5	1	1.0	22,328		22,328
5-11	Engineering Tech. (Vacant)	9/1	1	1.0	11,614		11,614
5-12	Programs Assistant (Pennell)	7/1	1	1.0	9,520		9,520
5-20	Maintenance Supv. (Hape)	12/3	1	1.0	17,794		17,794
5-33	Project Foreman (Hoppe)	Ungr.	1	1.0	13,084		13,084
5-35	Maintenance Foreman (Hayes)	Ungr.	1	1.0	11,357		11,357
5-63	Engr. Equip. Oper. (Clarke)	Ungr.	1	1.0	10,213		10,213
5-65	Engr. Equip. Oper. (Hape)	Ungr.	1	1.0	10,213		10,213
5-66	Maintenance Foreman (Berg)	Ungr.	1	1.0	11,357		11,357
5-68	Engr. Equip. Oper. (Borresen)	Ungr.	1	1.0	10,213		10,213
5-70	Engr. Equip. Oper. (Marchington)	Ungr.	1	1.0	10,650		10,650
5-80	Maintenance Supv. (Armstrong)	11/3	1	1.0	14,928		14,928
5-84	Maintenance Foreman (Williams)	Ungr.	1	1.0	11,960		11,960
5-91	Maintenance Supv. (Tobin)	11/4	1	1.0	15,394		15,394
6-03	Civil Engineer (Fellbaum)	12/5	1	1.0	18,906		18,906
6-07	Supv. Electronic Tech. (Huffman)	11/9	1	1.0	17,724		17,724
6-18	Maintenance Supv. (Batzloff)	11/3	1	1.0	14,928		14,928
6-27	Building Foreman (Quesenberry)	Ungr.	1	1.0	12,564		12,564
6-31	Electrician Foreman (Peterson)	Ungr.	1	1.0	13,167		13,167
6-39	Pipefitter Foreman (Wood)	Ungr.	1	1.0	12,564		12,564
6-47	Carpenter (Hornbecker)	Ungr.	1	1.0	9,652		9,652
6-83	Pipefitter (Dore)	Ungr.	1	1.0	9,954		9,954
6-89	Maintenance Supv. (McCann)	11/2	1	1.0	14,462		14,462

Authorized by Associate Director Norwood's memorandum of November 9, 1973.

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITSNUMERICAL CODE
6860-6890DATE
10/16/73FISCAL YEAR
1974

ACCOUNT NUMBER

AGENCY OFFICE		FUND		FISCAL YEAR		ACCOUNT NUMBER	
Yellowstone National Park		General Fund		1974			
APPROPRIATION, FUND, AND TITLE		ALLOCATION		FISCAL YEAR		ACCOUNT NUMBER	
Operation of the National Park System		General Fund		1974			
POSITION NUMBER	DESCRIPTION	GRANT NO.	MAN. YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN	
66-55	Painter (Meeks)	Ungr.	1.0	9,652		9,652	
73-13	Proc. & Prop. Mgmt. Officer (Hensley)	12/1	1.0	17,794		17,794	
73-33	Supv. Supply Tech. (Tyson)	7/1	1.0	12,001		12,001	
74-72	Supv. Equip. Mgr. (Ballard)	11/1	1.0	18,194		18,194	
74-70	Mechanic Foreman II (Herne)	Ungr.	1.0	12,459		12,459	
74-68	Mechanic Leader (Gillett)	Ungr.	1.0	11,274		11,274	
74-69	Mechanic Heavy Duty (Smith)	Ungr.	1.0	10,234		10,234	
74-71	Mechanic Heavy Duty (Tandy)	Ungr.	1.0	10,234		10,234	
74-73	Mechanic Heavy Duty (Gray)	Ungr.	1.0	10,234		10,234	
74-76	Mechanic Automotive (Smith)	Ungr.	1.0	9,963		9,963	
74-77	Mechanic Automotive (Manning)	Ungr.	1.0	9,963		9,963	
74-75	Equip. Dispatcher (Bauer)	Ungr.	1.0	9,422		9,422	
		30	99.0	1,365,671	+ 23,560	1,389,231	
Deduct Lapses				- 53,150	- 13,721	- 66,871	
Not permanent				1,282,516	+ 14,839	1,297,355	
Positions other than permanent:		70			+ 3	25	
Temporary full-time employment:							
	Management Assistant	7/5	1	0.4	4,150		4,150
	Management Assistant	4/1	1	0.4	2,650		2,650
	Supply Technician	7/2	1	0.9	9,082		9,082
	Personnel Clerk	5/5	1	0.9	8,040		8,040
	North Dist. Clerk	5/2		0.1	917		917
	Purchasing Agent	7/2	1	0.9	9,082		9,082
	Supply Technician, S. D.	7/2	1	0.9	9,082		9,082
	West District Clerk	5/5		0.1	588		588
	Secretary-Steno	5/2	1	0.9	7,344		7,344
	South District Clerk	5/3		0.1	948		948
	Clerk-Steno	4/5	1	0.9	7,198		7,198
	Clerk-Steno	4/1	1	0.9	6,352		6,352
	Clerk-Steno	4/4	1	0.9	6,937		6,937
	Personnel Clerk	4/4	1	0.9	6,937		6,937
	Clerk-Steno	5/3	1	0.9	7,576		7,576
	Clerk-Typing	4/2	1	0.9	6,564		6,564
	Clerk-Typist	3/2	1	0.9	5,846		5,846
	Clerk-Typist	3/2	1	0.9	5,846		5,846
	Clerk-Typist	3/2	1	0.9	5,846		5,846
	Clerk-Steno, W. D.	3/2		0.1	720		720
	Clerk-Steno, S. D.	3/1		0.1	377		377
	Clerk-Typist, S. D.	3/1		0.1	377		377
	Clerk-Typist, N. D.	3/2		0.1	720		720
	Clerk-Typist	3/1	1	0.3	1,883		1,883
	Program Clerk	5/1	1	0.9	7,102		7,102

FINANCIAL PLAN - OPERATING PROGRAM

DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

LOCATION		PERSONNEL DATA				FISCAL YEAR	
Lower National Park		National Park Service				1974	
Operation of the National Park System		Park Ranger				AS ACCOUNT NUMBER	
SITATION NUMBER	DESCRIPTION	GRADE GS	MO.	HR. YR.	PLANS PLANS	UNIT TOTAL OF PLANS	COUNTY PLANS
	Clerk-Typist	4/1	1	0.1	2,102		6,352
	Biologist	5/1	1	0.1	4,000		4,000
	Clerk-Typing	5/1	1	0.1	7,102		7,102
	Warehouseman	Ungr.	1	0.1	2,290		2,290
	Park Ranger (Historian)	5/1	1	0.1	1,776		1,776
	Park Ranger	4/1	1	0.3	2,119		2,119
	Park Technician	4/5	1	0.1	7,199		7,199
	Maintenance Worker	Ungr.	1	0.1	6,290		6,290
	Clerk-Steno	4/1	1	0.1	6,192		6,192
	Oral Communications Specialist	11/1	1	0.3	4,199		4,199
	Supv. Park Ranger	7/2	1	0.3	2,951		2,951
	Supv. Park Ranger	7/1	1	0.6	5,712		5,712
	Supv. Park Ranger	6/5	1	0.3	2,915		2,915
	Supv. Park Ranger	6/2	1	0.3	2,657		2,657
	Supv. Park Ranger	6/1	4	1.0	8,572		8,572
	Park Ranger	5/1	26	9.0	69,240		69,240
	Park Ranger	4/1	16	5.0	34,410		34,410
	Park Technician	5/2	1	0.9	7,156		7,156
	Information Receptionist	3/1	4	1.0	6,128		6,128
	Clerk	5/2	3	0.2	1,590		1,590
	Clerk-Typist	4/1	3	0.1	688		688
	Clerk-Typist	3/1	3	0.1	612		612
	Park Technician	6/2	1	0.9	8,179		8,179
	Park Technician	5/3	1	0.9	7,584		7,584
	Park Technician	4/5	1	0.9	7,200		7,200
	Supv. Park Technician	8/4	1	0.2	2,385		2,385
	Supv. Communications Operator	4/8	1	0.9	7,834		7,834
	Communications Operator	3/2	1	0.9	5,837		5,837
	Clerk-Steno	4/3	1	0.9	6,778		6,778
	Clerk-Steno	4/3	1	0.9	6,778		6,778
	Clerk-Steno	4/2	1	0.9	6,566		6,566
	Clerk (Typing)	4/2	1	0.9	6,566		6,566
	Clerk-Typist	3/3	1	0.9	6,029		6,029
	Clerk, W. D.	5/4		0.1	847		847
	Clerk, S. D.	5/3		0.2	1,513		1,513
	Clerk, N. D.	5/2		0.2	1,465		1,465
	Clerk, W. D.	3/2		0.2	1,177		1,177
	Clerk, N. D.	3/2		0.2	1,177		1,177
	Clerk, S. D.	4/1		0.1	688		688
	Clerk, S. D.	3/1		0.1	377		377
	Park Rangers	7/1	5	1.2	11,335		11,335
	Park Rangers	6/1	9	2.1	17,820		17,820
	Park Rangers	5/1	37	14.3	113,371		113,371
	Park Rangers	4/1	6	1.9	13,328		13,328

FINANCIAL PLAN - OPERATING PROGRAM

DETAILS OF PERSONNEL COMPENSATION AND BENEFITS

NUMERIC CODE

6860 - 6890

DATE

10/16/73

FISCAL YEAR

1974

ACCOUNT NUMBER II

OFFICE		OFFICE		OFFICE		OFFICE	
OWSTONE National Park		National Park Service		National Park Service		National Park Service	
National Park Service		National Park Service		National Park Service		National Park Service	
National Park Service		National Park Service		National Park Service		National Park Service	
POSITION	DESCRIPTION	GRADE	NO.	RATE	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
	Fire Protection Inspector	7/1	1	0.6	5,712		5,712
	Supv. Fire Control Aid	5/1	1	0.6	4,616		4,616
	Supv. Fire Control Aid	5/1	1	0.3	2,308		2,308
	Fire Control Aid	5/1	1	0.2	1,539		1,539
	Fire Dispatcher	5/1	1	0.3	2,308		2,308
	Fire Control Aid	4/1	14	3.0	20,646		20,646
	Fire Control Aid	3/1	3	0.6	3,677		3,677
	Fire Control Aid	2/1	1	0.1	543		543
	Secretary-Steno	5/10	1	0.5	5,003		5,003
	Clerk, N. D.	5/1		0.1	770		770
	General Engineer	7/1	1	0.3	2,858		2,858
	Clerk, S. D.	5/2		0.1	795		795
	Clerk, S. D.	4/2		0.1	712		712
	Clerk-Typist, N. D.	4/1		0.1	689		689
	Clerk-Typist	4/2	1	0.5	3,556		3,556
	Clerk-Typist, N. D.	3/1		0.1	614		614
	Clerk, N. D.	5/5		0.1	872		872
	Clerk-Steno, S. D.	4/1		0.1	689		689
	Road Foreman	Ungr.	2	1.6	18,737		18,737
	Road Foreman	Ungr.	3	2.0	21,300		21,300
	Maintenance Foreman	Ungr.	2	1.8	22,612		22,612
	Trail Foreman	Ungr.	1	0.5	5,856		5,856
	Trail Foreman	Ungr.	1	0.5	5,200		5,200
	Road Leader	Ungr.	1	0.6	5,616		5,616
	Trail Leader	Ungr.	1	0.6	5,641		5,641
	Trail Leader	Ungr.	1	0.6	5,903		5,903
	Engineering Equip. Operator	Ungr.	15	6.6	67,404		67,404
	Engineering Equip. Operator	Ungr.	4	0.7	6,713		6,713
	Engineering Equip. Operator	Ungr.	15	2.6	28,267		28,267
	Motor Vehicle Operator	Ungr.	28	5.9	53,752		53,752
	Motor Vehicle Operator	Ungr.	21	2.1	9,747		9,747
	Maintenance Worker	Ungr.	11	4.2	34,420		34,420
	Maintenance Worker	Ungr.	8	5.7	46,713		46,713
	Maintenance Worker	Ungr.	13	1.5	12,387		12,387
	Laborer	Ungr.	55	15.5	112,219		112,219
	Maintenance Worker	Ungr.	1	0.5	4,223		4,223
	Laborer	Ungr.	1	0.2	1,490		1,490
	Maintenance Worker	Ungr.	1	0.5	4,556		4,556
	Laborer	Ungr.	1	0.3	1,927		1,927
	Secretary-Steno	5/10		0.4	4,002		4,002
	Clerk, N. D.	5/1	1	0.3	2,309		2,309
	Clerk, N. D.	5/5	1	0.1	872		872
	Clerk, S. D.	5/2	1	0.3	2,384		2,384
	Clerk-Steno	4/2	1	0.3	2,134		2,134

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

FINANCIAL PLAN - OPERATING PROGRAM

DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

2ND District

NUMERIC CODE

6860 - 6880

DATE

10/15/73

FISCAL YEAR

1974

ACCOUNT NUMBER

JOB OFFICE		FINANCIAL OFFICE				FISCAL YEAR	
Western National Park		Midwest Region				1974	
POSITION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY				ACCOUNT NUMBER	
Director of the National Park System		Park Management					
POSITION NUMBER	DESCRIPTION	GRADE GS.	NO.	MAN-YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
	Clerk-Typist, W. D.	3/4	1	0.2	1,348		1,348
	Clerk-Typist, N. D.	4/1	1	0.4	2,754		2,754
	Clerk-Typist, S. D.	3/1	1	0.1	614		614
	Clerk-Steno, S. D.	4/1	1	0.1	688		688
	Clerk-Typist	3/3	1	0.9	5,878		5,878
	Electronic Technician	9/3	1	0.9	11,157		11,157
	Maintenance Foreman	Ungr.	2	1.1	13,156		13,156
	B&U Foreman	Ungr.	1	0.5	5,678		5,678
	B&U Foreman	Ungr.	4	1.9	20,234		20,234
	Forestry Foreman	Ungr.	2	1.4	11,415		11,415
	Grounds Leader	Ungr.	1	0.5	4,545		4,545
	Pipefitter Leader	Ungr.	2	1.0	10,920		10,920
	Electronic Equipment Mechanic	Ungr.	3	2.1	20,136		20,136
	Electronic Equipment Helper	Ungr.	1	0.3	2,477		2,477
	Electrician	Ungr.	5	4.3	41,232		41,232
	Electrical Worker	Ungr.	3	1.5	12,386		12,386
	Carpenter	Ungr.	9	5.7	55,012		55,012
	Carpenter Helper	Ungr.	2	1.0	7,946		7,946
	Painter	Ungr.	5	2.2	20,455		20,455
	Signmaker	Ungr.	2	1.3	12,249		12,249
	Motor Vehicle Operator	Ungr.	4	1.2	10,533		10,533
	Motor Vehicle Operator	Ungr.	9	0.6	5,117		5,117
	Maintenance Worker	Ungr.	9	1.1	9,381		9,381
	Maintenance Worker	Ungr.	33	5.3	43,765		43,765
	Pipefitter	Ungr.	4	2.0	19,926		19,926
	Pipefitter Helper	Ungr.	1	0.5	4,129		4,129
	Engineering Equipment Operator	Ungr.	1	0.5	4,982		4,982
	Engineering Equipment Operator	Ungr.	1	0.5	4,711		4,711
	Disposal Plant Operator	Ungr.	3	1.0	8,445		8,445
	Laborer	Ungr.	32	10.1	75,209		75,209
	Maintenance Worker	Ungr.	1	0.4	3,373		3,373
	Maintenance Worker	Ungr.	1	0.4	3,854		3,854
	Animal Packer Foreman	Ungr.	1	0.9	10,042		10,042
	Animal Packer	Ungr.	1	0.9	8,256		8,256
	Supply Clerk	5/3	1	0.9	7,393		7,393
	Clerk (Typing)	4/5	1	0.8	6,240		6,240
	Warehouseman	Ungr.	1	0.9	7,915		7,915
	Warehouseman	Ungr.	1	0.9	7,915		7,915
	Warehouseman	Ungr.	1	0.3	2,290		2,290
	Warehouseman	Ungr.	1	0.3	1,505		1,505
	Mechanic Heavy Duty	Ungr.	1	0.9	9,446		9,446
	Mechanic Automotive	Ungr.	1	0.9	9,197		9,197
	Mechanic Automotive	Ungr.	1	0.9	9,197		9,197
	Mechanic Automotive	Ungr.	1	0.9	9,197		9,197
	Body & Fenderman	Ungr.	1	0.9	9,197		9,197

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

FINANCIAL PLAN - OPERATING PROGRAM

DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

3100 R. 10/16/73

NUMERIC CODE
6860-6890DATE
10/16/73

WORK OFFICE		FINANCE OFFICE			FISCAL YEAR		
Lowerstone National Park		Midwest Region			1974		
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY			ACCOUNT NUMBER		
Operation of the National Park System		Park Management					
SITATION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN- YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
	Mechanic Automotive	Ungr.	1	0.9	8,500		8,500
	Automotive Worker	Ungr.	1	0.9	7,930		7,930
	Warehouseman	Ungr.	1	0.9	7,622		7,622
	Automotive Worker	Ungr.	1	0.7	5,501		5,501
	Automotive Worker	Ungr.	1	0.7	5,285		5,285
	Sub-Total		539	199.5	1,673,750	0	1,673,750
	Part-time employment:						
	Clerk-Typist	2/1	1	0.9	4,889		4,889
	Clerk-Typist	2/1	1	0.9	4,889		4,889
	Clerk-Typist	2/1	1	0.9	4,889		4,889
	Clerk-Typist	2/1	1	0.9	4,889		4,889
			4	3.6	19,556		19,556
	Total other than permanent		543	203.1	1,673,309	-	1,673,309
	Other personnel compensation:						
	Overtime pay				38,883		38,883
	Holiday pay				34,394		34,394
	Night work differential				7,995		7,995
	Sunday differential				40,076		40,076
	Total other personnel compensation				121,348	- 0 -	121,348
	Total personnel compensation				3,102,176	14,559	3,117,015
	Add Personnel Benefits:						
	(10% of above "net permanent")				128,252	1,484	129,736
	(10% of above "other than permanent")				169,334		169,334
	Cost of living allowance				----		
	Uniform allowance:						
	Permanent				6,375		6,375
	Temporary				21,663		21,663
	Total personnel benefits				325,590	1,484	327,074
	Anticipated current year cost of wage board increases to become effective between July 1, 1973, and June 30, 1974. Anticipated effective date: September 16, 1973						

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

JMP 8/1/74

NUMERIC CODE

6860-1500

DATE

10/16/74

FISCAL YEAR

1974

ACCOUNT NUMBER

AGENCY

Iowa National Park

APPROPRIATION SYMBOL AND TITLE

Operation of the National Park System

POSITION
NUMBER

DESCRIPTION

GRADE

NO.

IN-

CR.

CURRENT
PLAN
AMOUNTNET TOTAL
OF
CHANGESCURRENT
PLANPersonnel compensation:

Permanent

17,645

17,645

Other than permanent

73,740

73,740

Other personnel compensation

3,073

3,073

Total personnel compensation

94,458

94,458

Related benefits:

(10% of above "permanent")

1,765

1,765

(10% of above "other than
permanent")

7,379

7,379

* Cost of living allowance

Total related benefits

9,144

9,144

Total wage board increasecosts - personnel compensa-
tion and benefits (report
total as wage board informa-
tional entry)

103,602

103,602

Total personnel compensation
and benefits (amount to be
included on Form 10-561)

3531302

15323 354762

I. Informational entries for wage board increases
to become effective during fiscal 1974:Estimated full-year cost of
wage rate increases anticipated
to become effective on
September 16, 1973

127,842

Current year cost of wage rate
increases to become effective
during 1974 fiscal year,
included in this plan
(rounded) (9½ months)

103,602

Balance of full-year cost that
will be needed as increases in
1975 fiscal year allowance
(2½ months)

24,240

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICEFINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

300 1000000

NUMBER OF

6 50-0000

DATE

4/1/73

FISCAL YEAR

1974

ACCOUNT NUMBER

AREA OR OFFICE

Yellowstone National Park

FINANCE OFFICE

Midwest Region

APPROPRIATION SYMBOL AND TITLE

Operation of the National Park Systems

ACTIVITY OR ACTIVITIES

Park Management

POSITION
NUMBER

DESCRIPTION

GRADE
GS-

NO.

MAN-
YR.ORIGINAL
PLAN
AMOUNTNET TOTAL
OF
CHANGESCURRENT
PLAN

II. Informational entries for classified pay increases

effective January 1, 1973, applicable to 1974 plan

Permanent				53,921	+ 803	54,724
Other than permanent				28,767	+ 192	28,959
				82,688	+1,105	83,793
Other personnel compensation:						
Overtime pay				1,251		1,251
Holiday pay				945		945
Differentials				1,406		1,406
				3,602		3,602
Related benefits:						
Permanent				5,392	+ 97	5,489
Other than permanent				2,877	+ 19	2,896
				8,269	+ 116	8,385
Total classified pay increases						
costs - (rounded)				94,600	+1,300	95,900

NUMERIC CODE
674
DATE
4-25-72
FISCAL YEAR
1972
ACCOUNT NO.
457

FINANCIAL PLAN - OPERATING PROGRAM

AREA OR OFFICE		FINANCE OFFICE		DATE		
Yellowstone National Park		Midwest Region		4-25-72		
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR ACTIVITIES		FISCAL YEAR		
4X1059 PLANNING & Construction		REPAIRS & MAINTENANCE		1972		
COMPONENTS OF COST BY OBJECT CLASSIFICATION		ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN		
1. & 12. Personnel Compensation and Benefits (From Form 10-561a)		125,566				
2. - Travel and Transportation of Persons		100				
2. - Transportation of Things		385				
3. - Rent, Communications, and Utilities (Includes GSA Office Space Rental \$)		12,000				
1. - Printing and Reproduction						
5.1 - Other Services (Itemize on reverse side)		7,350				
5.2 - Services of Other Agencies (Itemize on reverse side)						
5. - Supplies and Materials and Non-Capitalized Equipment (Direct Purchases)		81,929				
1. - Equipment (Capital Acquisitions - Itemize Below)						
		4,870				
2. - Lands and Structures						
1. - Grants, Subsidies, and Contributions						
2. - Insurance Claims and Indemnities						
1. - Depreciation of Equipment						
Equipment Operations						
Storehouse Operations						
2. - Corral Operations						
Sign Shop Operations						
Manufacturing of Stores and Equipment						
3. - Utility Systems (NPS Operations Only)						
TOTAL AUTHORIZED PLAN		231,200				
DISTRIBUTION		EST. CUMULATIVE OBLIGATIONS BY APPORTIONMENT PERIOD (Quarterly or by annual)				
NO.	TO	COMPONENTS	FIRST	SECOND	THIRD	FOURTH
		Personal services (11 & 12) . . .				
		All Other Expenses				
		Capital Outlays (31)				
		Total Authorized Plan				
RECOMMENDED (Sig. & Title)		CONCURRED (Sig. & Title)		APPROVED (Sig. & Title)		
<i>W. E. Hays</i>		<i>J. Leonard</i>		<i>J. Leonard</i>		
(Date)		(Date)		(Date)		
		SUPERINTENDENT		Director, Midwest Region		

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

NUMERIC CODE	6074
DATE	4-25-60
FISCAL YEAR	1960
ACCOUNT NUMBER	2200

AREA OR OFFICE		FINANCE OFFICE					
Yellowstone National Park		Midwest Region					
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY					
14X1039 Construction		General Administration					
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN-YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
<u>Permanent Full-Time Positions</u>							
34-59	Pipefitter (Drummond) WG-10	Ungr.	1	1.0	9,964		
34-81	Maint. Frm. (Welker) WG-11	"	1	1.0	12,450		
	Total Permanent		2	2.0	22,423		
<u>Positions Other Than Permanent</u>							
	Maintenance Foreman, WG-10	Ungr.	1	0.3	3,407		
	Maintenance Worker, WG-5	"	1	0.9	7,432		
	Boiler Plant Operator, WG-7	"	3	2.7	24,598		
	Carpenter, WG-9	"	3	2.1	20,268		
	Electrician, WG-10	"	1	0.8	7,971		
	Painter, WG-9	"	2	1.1	10,616		
	Pipefitter, WG-10	"	1	0.7	6,974		
	Laborer, WG-3	"	1	0.3	2,234		
	Carpenter Helper, WG-5	"	1	0.5	3,973		
	Pipefitter Helper, WG-5	"	1	0.2	1,589		
	Electrician Helper, WG-5	"	1	0.2	1,589		
	Total Other Than Permanent		16	9.8	90,651		
<u>Other Personnel Compensation:</u>							
	Overtime				160		
	Holiday				225		
	Night Differential				225		
	Sunday Differential				100		
	Total Other Personnel Comp.				710		
	Total Personnel Compensation				113,784		

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICEFINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

NUMERIC CODE

6874

DATE

1-28-73

FISCAL YEAR

1974

ACCOUNT NUMBER

1250

AREA OR OFFICE

Yellowstone National Park

FINANCE OFFICE

Midwest Region

APPROPRIATION SYMBOL AND TITLE

14X1033 Construction

ACTIVITY OR SUBACTIVITY

Guarders Operation

POSITION
NUMBER

DESCRIPTION

GRADE
GS-

NO.

MAN-
YR.ORIGINAL
PLAN
AMOUNTNET TOTAL
OF
CHANGESCURRENT
PLANAdd Personnel Benefits:

10% of Above Net Permanent

2,242

10% of Above Other Than
Permanent

9,065

Cost of Living Allowance

Uniform Allowance:

Permanent

250

Temporary

225

Total Personnel Benefits

11,732

Total Personnel Compensation
And Benefits (amount to be
included on Form 10-561)

125,566

Total Authorized Program

231,200

SUMMARY OF REIMBURSABLE PROGRAMReimbursements from Federal
Services:

350

Reimbursements from Non-Federal
Services:

Yellowstone School Dist. #1

5,237

Protestant Ministry-Yellowstone

1,311

Federal Employees

224,302

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UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

Yellowstone

FINANCIAL PLAN - OPERATING PROGRAM

DATE: 10-73
FISCAL YEAR: 1974
ACCOUNT NO: 4-10

AGENCY OR OFFICE		FINANCIAL EFFECT	
Yellowstone National Park		Midwest Region	
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBJECT	
14X 1009 PLANNING & CONSTRUCTION		PRIME - WILDERNESS	
COMPONENTS OF COST BY OBJECT CLASSIFICATION		ORIGINAL PLAN	NET TOTAL OF CHANGES
12 - Personnel Compensation and Benefits (From Form 10-561a)		58,301	
- Travel and Transportation of Persons			
- Transportation of Things			
- Rent, Communications, and Utilities (Includes GSA Office Space Rental \$)		17,580	
- Printing and Reproduction			
1 - Other Services (Itemize on reverse side)			
2 - Services of Other Agencies (Itemize on reverse side)			
6 - Supplies and Materials and Non-Capitalized Equipment (Direct Purchases)		26,419	
1 - Equipment (Capital Acquisitions - Itemize Below)			
- Lands and Structures			
- Grants, Subsidies, and Contributions			
- Insurance Claims and Indemnities			
- Depreciation of Equipment			
Equipment Operations			
Storehouse Operations			
- Corral Operations			
Sign Shop Operations			
Manufacturing of Stores and Equipment			
- Utility Systems (NPS Operations Only)			
TOTAL AUTHORIZED PLAN		102,300	

DISTRIBUTION		EST. CUMULATIVE OBLIGATIONS BY APPORTIONMENT PERIOD (Quarterly or Triannual)			
TO	COMPONENTS	FIRST	SECOND	THIRD	FOURTH
	Personal services (11 & 12)				
	All Other Expenses				
	Capital Outlays (31)				
	Total Authorized Plan				

APPROVED: (Signature) DATE: 10-73
APPROVED: (Signature) DATE: 10-73

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICEFINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

NUMBER	81-73
DATE	12/1/60
FISCAL YEAR	1961
ACQUISITION NUMBER	601

ACR OFFICE		FINANCE OFFICE		ACTIVITY OR FACILITY		ACQUISITION NUMBER	
Yellowstone National Park		Midwest Division		Rocky Mountain Region			
APPROPRIATION SYMBOL AND TITLE							
4X1039 Planning & Construction							
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN-YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
	<u>Permanent Full-Time Positions:</u>	--	-	--	---		
	Net Permanent	--	-	--	---		
	<u>Positions Other Than Permanent</u>						
	<u>Temporary Full-Time Positions:</u>						
	Disposal Plant Operator, WG-7	Ung.		1.7	15,305		
	Pipefitter, WG-10	"		1.4	14,347		
	Engr. Equip. Oper., WG-11	"		0.4	4,283		
	Motor Vehicle Operator, WG-7	"		0.4	3,160		
	Motor Vehicle Operator, WG-6	"		0.4	3,070		
	Pipefitter Helper, WG-5	"		0.4	2,860		
	Laborer, WG-3	"		1.0	7,595		
	Total Other Than Permanent			5.7	50,626		
	<u>Other Personnel Compensation:</u>						
	Overtime Pay				908		
	Holiday Pay				570		
	Night Differential						
	Sunday Differential				864		
	Total Other Compensation				2,342		
	Total Personnel Compensation				52,968		

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

NUMERIC CODE

DATE

FISCAL YEAR

ACCOUNT NUMBER

AREA OR OFFICE

FINANCIAL OFFICE

Yellowstone National Park

District Office

PROPRIATION SYMBOL AND FUND

ACTIVITY OR SUBACTIVITY

17X1059 Personnel & Activities

Revenue from Park

POSITION
NUMBER

DESCRIPTION

GRADE
GS-

NO.

MAN-
YR.ORIGINAL
PLAN
AMOUNTNET TOTAL
OF
CHANGESCURRENT
PLANAdd Personnel Benefits:

10% of Net Permanent

10% of Other than Permanent

Cost of Living Allowance

5,063

Uniform Allowance:

Permanent

150

Temporary

120

Total Personnel Benefits

5,333

Total Personnel Compensation
and Benefits (amount to be
included on Form 10-561)

58,301

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

FINANCIAL PLAN - OPERATING PROGRAM

DETAIL BY COST FEATURE

NATIONAL PARK SERVICE		NATIONAL PARK SERVICE		NATIONAL PARK SERVICE	
Yellowstone National Park		Yellowstone National Park		Yellowstone National Park	
ACTIVITY OR SUBACTIVITY		ACTIVITY OR SUBACTIVITY		ACTIVITY OR SUBACTIVITY	
REPAIRS		REPAIRS		REPAIRS	
COST	COST FEATURE	ORIGINAL	NET TOTAL	CURRENT	
COUNT		PLAN	OF CHANGES	PLAN	
NUMBER					
	Total Authorized Plan As Shown On Form 10-561	102,259			
	<u>SUMMARY OF OTHER CONTRIBUTABLE SERVICES:</u>				
	Quarters	8,228			
	Utilities furnished concessioners and others	94,031			
	Total Authorized Plan	102,259 102,300			

FINANCIAL PLAN - OPERATING PROGRAM

DATE: 6/10/73
FISCAL YEAR: 1974
PROJECT: 1074
PAGE: 1

A OR OFFICE Yellowstone National Park		PROJECT M	REGION I	DATE 6/10/73
APPROPRIATION SYMBOL AND TITLE 10X1037 PLANNING & CONSTRUCTION		ACTIVITY R	SUBACTIVITY 2015	PERIOD 1974
COMPONENTS OF COST BY OBJECT CLASSIFICATION		EST. TOTAL 1974	NET TOTAL CHANGES	CURRENT PLAN
12- Personnel Compensation and Benefits (From Form 10-561a)		31,172		
- Travel and Transportation of Persons				
- Transportation of Things				
- Rent, Communications, and Utilities (Includes GSA Office Space Rental)				
- Printing and Reproduction				
1 - Other Services (Itemize on reverse side)		2,640		
2 - Services of Other Agencies (Itemize on reverse side)				
5 - Supplies and Materials and Non-Capitalized Equipment (Direct Purchases)		16,488		
- Equipment (Capital Acquisitions - Itemize Below)				
- Lands and Structures				
- Grants, Subsidies, and Contributions				
- Insurance Claims and Indemnities				
- Depreciation of Equipment				
Equipment Operations				
Storehouse Operations				
Corral Operations				
Sign Shop Operations				
Manufacturing of Stores and Equipment				
- Utility Systems (NPS Operations Only)				
TOTAL AUTHORIZED PLAN		50300		

DISTRIBUTION		EST. CUMULATIVE OBLIGATIONS BY APPORTIONMENT PERIOD (Quarterly or 10 months)			
TO	COMPONENTS	FIRST	SECOND	THIRD	FOURTH
	Personal Services (11 & 12)				
	All Other Expenses				
	Capital Outlays (31)				
	Total Authorized Plan				

COMMITTEE (Sig. & Title) (Date) SUPERVISOR (Sig. & Title) (Date) APPROVE (Sig. & Title) (Date)

[Handwritten signatures and dates follow]

FINANCIAL PLAN - OPERATING PROGRAM
 DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

ACCOUNTING CODE	6874
DATE	4/10/70
YEAR	1970
ACCOUNT NUMBER	C/S

POSITION NUMBER	DESCRIPTION	GRADE	NO.	RATE PER YEAR	PERSONAL PLAN AMOUNT	NET TOTAL OF CHARGES	CURRENT PLAN
	Other Personnel Compensation:						
	Equip. Oper, WG-11	Ungr.		0.3	2,808		
	Equip. Oper, WG-10	Ungr.		0.5	4,932		
	Equip. Oper, WG-9	Ungr.		0.1	998		
	Incinerator Operator, WG-9	Ungr.		1.2	9,538		
	Laborer, WG-7	Ungr.		0.8	6,144		
	Total Other than Permanent			2.9	24,420		
	Other Personnel Compensation:						
	Overtime Pay				2,656		
	Holiday Pay				641		
	Sunday Differential				793		
	Total Other Pers. Comp.				4,090		
	Total Personnel Comp.				28,510		
	Add Personnel Benefits:						
	10% of above Other Than Permanent				2,442		
	Uniform Allowance:						
	Temporary				220		
	Total Personnel Benefits				2,662		
	Total Personnel Comp. & Benefits				31,172		

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
FINANCIAL PLAN - OTHER LAND PROGRAM
DETAIL BY COST CENTER

ON OFFICE		DATE		PAGE	
OPERATION		BY		NO.	
NAME AND TITLE		DATE		PAGE	
X 1129 <i>Planning & Contract</i>					
COST ACCOUNT NUMBER	COST FEATURE	AMOUNT	NET TOTAL		
	Total authorized plan as shown on Form 10-561	50,272			
<u>SUMMARY OF OTHER FINANCIAL DETAILS</u>					
	Quarters	3,656			
	Utilities furnished concessioners and other	<i>46,614</i> <i>46,614</i>			
	Total Authorized Plan	<i>50,272</i> <i>50,300</i>			

FINANCIAL PLAN - OPERATING PROGRAM

DATE
1/1/74
FISCAL YEAR
1974
ACTIVITY
1/1/74

EA OR OFFICE Yellowstone National Park	FINANCE OFFICE MIDWINTER	ACTIVITY OR PROJECT Planning & Construction
PROPRIATION SYMBOL AND TITLE 1X1039 PLANNING & CONSTRUCTION		

COMPONENTS OF COST BY OBJECT CLASSIFICATION	ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT YEAR
& 12 - Personnel Compensation and Benefits (From Form 10-561a)	54,253		
- Travel and Transportation of Persons	---		
- Transportation of Things	---		
- Rent, Communications, and Utilities (Includes GSA Office Space Rental \$)	68		
- Printing and Reproduction	---		
1 - Other Services (Itemize on reverse side)	---		
2 - Services of Other Agencies (Itemize on reverse side)	---		
- Supplies and Materials and Non-Capitalized Equipment (Direct Purchases)	19,949		
- Equipment (Capital Acquisitions - Itemize Below)	---		

- Lands and Structures	---		
- Grants, Subsidies, and Contributions	---		
- Insurance Claims and Indemnities	---		
- Depreciation of Equipment	---		
Equipment Operations	---		
Storehouse Operations	---		
- Corral Operations	---		
Shop Operations	---		
Manufacturing of Stores and Equipment	---		
- Utility Systems (NPS Operations Only)	---		
TOTAL AUTHORIZED PLAN	74,300		

DISTRIBUTION		EST. CUMULATIVE OBLIGATIONS BY APPORTIONMENT PERIOD (Quarterly or Triannual)			
O.	TO	COMPONENTS	FIRST	SECOND	THIRD
		Personal services (11 & 12)			
		All Other Expenses			
		Capital Outlays (31)			
		Total Authorized Plan			

RECOMMENDED BY (Name & Title) W. E. Hoff	(Date) 1/1/74	CONCURRED BY (Name & Title) D. J. [unclear]	(Date) 1/1/74	APPROVED BY (Name & Title) J. J. [unclear]	(Date) 1/1/74
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FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

OFFICE OF ORIGIN		FINANCIAL OFFICE		FISCAL YEAR		
Yellowstone National Park		Wildlife Division		1978		
PROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUB-PROJECT		ACCOUNT NUMBER		
14X1037 PLANNING & CONSTRUCTION		RESEARCH & DEVELOPMENT		460		
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN-YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES
	<u>Positions other than permanent</u>					
	Maint. Foreman, WS-10	Ungr.		0.2	1,938	
	E&U Foreman, WS-6	"		0.3	3,451	
	Motor Vehicle Oper., WG-7	"		2.3	19,903	
	Motor Vehicle Oper., WG-6	"		0.8	6,195	
	Laborer, WG=3	"		1.9	14,476	
	Total Other Than Permanent			5.5	45,968	
	<u>Other Personnel Compensation:</u>					
	Overtime Pay				689	
	Holiday Pay				1,236	
	Sunday Differential				1,129	
	Total Other Personnel Comp.				3,054	
	Total Personnel Compensation				49,022	
	<u>Personnel Benefits:</u>					
	10% of Above Other Than Perm.				4,597	
	<u>Uniform Allowance:</u>					
	Temporary				664	
	Total Personnel Benefits				5,261	
	Total Personnel Comp. & Benefits				54,283	

FINANCIAL PLAN - OPERATING

DETAIL BY COST FEATURE

FOR OFFICE			
Lowstone National Park			
APPROPRIATION SYMBOL AND TITLE			
1027 Planning & Construction			
COST ACCOUNT NUMBER	COST FEATURE	ORIGINAL PLAN	REVISION PLAN
	Total Authorized Plan as Shown On Form 10-561	74,309	
	<u>SUMMARY OF OTHER REimbURSABLE SERVICES</u>		
	Quarters	5,500	
	Utilities furnished Concessioners and others	68,809	
	Total Authorized Plan	74,309	

UNITED STATES DEPARTMENT OF THE INTERIOR
 NATIONAL PARK SERVICE

 FINANCIAL PLAN - OPERATING PROGRAM
 DETAIL BY COST FEATURE

PROGRAM CODE	6174
DATE	10-1-77
PERIOD YEAR	1976
ACCOUNT NO.	1110

MAJOR OFFICE		FINANCE OFFICER		PROGRAM CODE	
Yellowstone National Park		Midwest Section		1074	
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY		ACCOUNT NO.	
1037 PLANNING & CONSTRUCTION		REIMBURSABLE ACCOUNT		1110	
COST ACCOUNT NUMBER	COST FEATURE	ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN	
	Total Authorized Plan As Shown On Form 10-561	15,630			
	<u>SUMMARY OF OTHER REIMBURSABLE SERVICES:</u>				
	Miscellaneous - other	15,630			
	Total Authorized Plan	15,630			

FINANCIAL PLAN - OPERATING PROGRAM

AREA OR OFFICE

Yellowstone National Park

APPROPRIATION SYMBOL AND TITLE

4X1037 PLANNING & CONSTRUCTION

FINANCIAL YEAR

1969

ACTIVITY OR PROJECT

RECONSTRUCTION

COMPONENTS OF COST BY OBJECT CLASSIFICATION

ORIGINAL PLAN

REVISAL

PERCENT

1 & 12 - Personnel Compensation and Benefits

(From Form 10-561a)

- Travel and Transportation of Persons

- Transportation of Things

- Rent, Communications, and Utilities

(Includes GSA Office Space Rental \$)

5,225

- Printing and Reproduction

1 - Other Services (Itemize on reverse side)

2 - Services of Other Agencies (Itemize on reverse side)

- Supplies and Materials and Non-Capitalized Equipment

(Direct Purchases)

21,975

- Equipment (Capital Acquisitions - Itemize Below)

- Lands and Structures

- Grants, Subsidies, and Contributions

- Insurance Claims and Indemnities

- Depreciation of Equipment

Equipment Operations

Storehouse Operations

- Corral Operations

Sign Shop Operations

Manufacturing of Stores and Equipment

- Utility Systems (NPS Operations Only)

TOTAL AUTHORIZED PLAN

27,200

DISTRIBUTION

EST. CUMULATIVE OBLIGATIONS BY APPORTIONMENT PERIOD (Quarterly or other)

TO

COMPONENTS

FIRST

SECOND

THIRD

FOURTH

Personal services (11 & 12)

All Other Expenses

Capital Outlays (31)

Total Authorized Plan

COMMENTS (12 & Title)

(Date)

CONCURRED (12 & Title)

(Date)

W. H. Hoge

[Signature]

J. J. [Signature]

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
FINANCIAL PLAN - OPERATING PROGRAM
DETAIL BY COST FEATURE

NUMERIC CODE	6873
DATE	11-05-74
FISCAL YEAR	1974
ACCOUNT NO.	441

FOR OFFICE		FINANCE OFFICE		FISCAL YEAR
ALLOWANCES, LABOR, ETC.		11-05-74		1974
OPERATION, MAINTENANCE, ETC.		11-05-74		ACCOUNT NO.
EX-1039 PLANNING & CONSTRUCTION		11-05-74		441
COST ACCOUNT NUMBER	COST FEATURE	ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN
	Total Authorized Plan	27,228		
	Deduct income from other Federal Agencies (General Services Administration, Post Office, Bureau of Public Roads, Sports Fisheries & Wildlife, Etc.)	27,228		
	Total Authorized Plan	27,228		

FINANCIAL PLAN - OPERATING PROGRAM

DATE: 4/10/73
FISCAL YEAR: 1973
ACCOUNT: 50

A OR OFFICE		FUND OR OBJECT		FUND OR OBJECT	
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY		ACCOUNT	
Yellowstone National Park, Wyoming (2140)		NPSO		1000	
80 of Recreation Facilities (44Y 500)				1000	
COMPONENTS OF COST BY OBJECT CLASSIFICATION		ORIGINAL PLAN	NET TOTAL OF CHANGES	CURRENT PLAN	
12 - Personnel Compensation and Benefits (From Form 10-561a)		247,333			
- Travel and Transportation of Persons		--			
- Transportation of Things		1,000			
- Rent, Communications, and Utilities (Includes GSA Office Space Rental \$)		7,314			
- Printing and Reproduction		6,163			
- Other Services (Itemize on reverse side)		900			
- Services of Other Agencies (Itemize on reverse side)		--			
- Supplies and Materials and Non-Capitalized Equipment (Direct Purchases)		8,910			
- Equipment (Capital Acquisitions - Itemize Below)		100			
Cafes(4) 4,000 Vehicles(2) 6,600					
Office Calculators(5) 3,000 House 42,400					
Radios(5) 4,500 Trailers(10)		60,500			
- Lands and Structures		--			
- Grants, Subsidies, and Contributions		--			
- Insurance Claims and Indemnities		--			
- Depreciation of Equipment					
Equipment Operations					
Storehouse Operations					
- Corral Operations		--			
Sign Shop Operations					
Manufacturing of Stores and Equipment		--			
- Utility Systems (NPS Operations Only)		--			
TOTAL AUTHORIZED PLAN		342,200			

DISTRIBUTION TO	EST. CUMULATIVE OBLIGATIONS BY APPORTIONMENT PERIOD (Quarterly or other as set)			
	COMPONENTS	FIRST	SECOND	THIRD
	Personal services (11 & 12)	100,077	101,000	201,077
	All Other Expenses	40,310	40,310	80,620
	Capital Outlays (31)			
	Total Authorized Plan	200,385	201,000	342,200

COMPLETED (Sig. & Title) (Date) CONCURRED (Sig. & Title) (Date) APPROVED (Sig. & Title) (Date)

Acting Chief Park Ranger 4/10/73 Marshall L. Cook 4/10/73
Acting Director, Midwest Region

25.1 OTHER SERVICE (100%)

Burroughs (Gas, Light & Telephone) \$ 900

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

DATE	4/1/77
FISCAL YEAR	1977
ACCOUNT NUMBER	575

POSITION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY		ACCOMPLISHMENT			
Yell. Stone National Park, Wyoming		NUNO		1977			
PDR of Interpretation Facilities				575			
POSITION NUMBER	DESCRIPTION	GRADE GS	NO.	PAY YR	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
PERMANENT, FULL-TIME POSITIONS							
5864-7	Supv. Park Ranger (Dodge)	9/5	1	.3	\$ 3,649		
5864-7	Supv. Park Ranger (Hurt)	9/5	1	.2	2,555		
5864-7	Supv. Park Ranger (Olsen)	9/1	1	.2	2,577		
5864-7	Supv. Park Ranger (Hush)	9/3	1	.2	2,477		
5864-7	Supv. Park Ranger (Mernin)	9/7	1	.3	4,181		
5864-7	Supv. Park Ranger (Vacant)	9/1	1	.2	2,321		
5864-7	Supv. Park Ranger (Johnson)	9/4	1	.3	3,833		
5864-7	Supv. Park Ranger (Patterson)	9/1	1	.2	2,323		
5864-7	Supv. Park Ranger (Banforth)	9/5	1	.3	3,949		
5864-7	Supv. Park Ranger (Vacant) (Vis. Use Spec.)	9/1	1	.6	6,968		
NET PERMANENT			10	2.8	34,832		
POSITIONS OTHER THAN PERMANENT							
Park Rangers		6/1	16	5.0	42,860		
Park Rangers		5/1	26	9.0	69,246		
Park Rangers		4/1	28	10.0	68,620		
TOTAL OTHER THAN PERMANENT			70	24.0	180,926		

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

NUMBER	655
DATE	1/12/78
FISCAL YEAR	1978
ACCOUNT NUMBER	573

AREAS OF INTEREST		FINANCE OFFICE			FISCAL YEAR		
Yellowstone National Park, Montana		1050			1978		
APPROPRIATION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY			ACCOUNT NUMBER		
PDA of Operation Facilities					573		
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN-YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
	<u>Total Personnel Compensation</u>						
	Overtime Pay				\$ 400		
	Holiday Pay				961		
	Night Differential				673		
	Sunday Pay				2,160		
	TOTAL OTHER PERSONNEL COMPENSATION				4,194		
	Total Personnel Compensation				220,002		
	<u>Add Personnel Benefits</u>						
	10% of net permanent				3,483		
	10% of other than permanent				18,093		
	<u>Uniform Allowance</u>						
	Permanent				1,250		
	Temporary				4,500		
	Total Personnel Benefits				27,331		
	TOTAL PERSONNEL COMPENSATION AND BENEFITS				247,333		

FINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

DATE	4/15/73
FISCAL YEAR	1973
ACCOUNT NUMBER	575

AREA OR OFFICE		FINANCIAL OFFICE			FISCAL YEAR		
Yellowstone National Park, Wyoming		MONTANA			1973		
PROPOSITION SYMBOL AND TITLE		ACTIVITY OR SUBACTIVITY			ACCOUNT NUMBER		
DRO of Recreation Facilities					575		
POSITION NUMBER	DESCRIPTION	GRADE GS-	NO.	MAN-YR.	ORIGINAL PLAN AMOUNT	NET TOTAL OF CHANGES	CURRENT PLAN
INFORMATIONAL REPORT FOR CLASSIFIED PAY INCREASE, EFFECTIVE JANUARY 7, 1973, APRIL 15, 1973							
TO FISCAL 1974 PAY GRADES							
	Permanent				\$ 1,773		
	Other Than Permanent				3,222		
					10,673		
	<u>Other Personnel Compensation</u>						
	Overtime Pay				31		
	Holiday Pay				69		
	Differentials				115		
					215		
	<u>Related Benefits</u>						
	Permanent				179		
	Other Than Permanent				320		
					1,064		
	<u>Total Classified Pay Increase Costs (Rounded)</u>				12,000		

1974

1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 26

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15,857

FIRST

COPIES TO: (Sgt. & Title)	(Date)	CONCURRENCE (Sgt. & Title)	(Date)	REMARKS
<i>[Signature]</i>	4/10/68	<i>[Signature]</i>	4/10/68	<i>[Handwritten Remarks]</i>
Administrative Officer		Superintendent		Director, Adult Probation

REPORT OF THE COMMISSIONER OF THE LAND OFFICE

25.1 Other Services:

Yellowstone National Park School Dist. No. 1	\$ 73,806
Gardiner, Montana School Districts Nos. 4 and 7	95,000
West Yellowstone, Montana School Dist. No. 69	2,500
Honeywell Service contract	255
Rug and drapery cleaning service	1,200
Reserve for unforeseen contingencies	30,000
Uncommitted reserves	56,795

\$ 259,655

600,000

600

600

600,000

600,000

600,000

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICEFINANCIAL PLAN - OPERATING PROGRAM
DETAIL OF PERSONNEL COMPENSATION AND BENEFITS

NUMERIC CODE

6863

DATE

4/21/74

FISCAL YEAR

1974

ACCOUNT NUMBER

610

NACH OFFICE

Lower Merion National Park

FINANCE OFFICE

Midwest Region

APPROPRIATION, FUND, AND TITLE: EDUC. Expense

5665 Children of Employees, TELL

ACTIVITY OR SUBACTIVITY

Educational Expenses

POSITION
NUMBER

DESCRIPTION

GRADE
GS-

NO.

MAN-
YR.ORIGINAL
PLAN
AMOUNTNET TOTAL
OF
CHANGESCURRENT
PLANPositions other than permanent:
Temporary full-time positions:

6-315 Maintenance Worker - WG 5/3

Ungr.

0.7

6,355

6-315 Boiler Plant Operator - WG 7/3

Ungr.

0.7

6,754

Total other than permanent

1.4

13,109

Other personnel compensation:

Overtime pay

0

Holiday pay

148

Night work differential

834

Sunday work differential

380

Total other personnel
compensation

1,362

Total personnel compensation

14,471

Add personnel benefits:

(10% of above "other than
permanent")

1,311

Uniform Allowance:

Temporary

75

Total personnel benefits

1,386

Total personnel compensa-
tion and benefits

15,857

II. INTERPRETATION AND RESOURCE MANAGEMENT

A. Interpretive Program

1. General Interpretation

Mammoth: The staff at Mammoth consisted of seven seasonal naturalists including one supervisor who was also acting North District Naturalist. The Mammoth Visitor Center was open all year with the exception of Christmas and New Years; however, it was regularly manned only during the period May 1 to October 31. 167,113 visitors used the center and the AV program was presented 2286 times to 32,978 people. Twilight activities, which have proven successful in the past, were increased.

Interpretive activities offered in the area are as follows: Twilight Terrace Walk two nights per week (778); Ft. Yellowstone Twilight Walk three nights per week (1349); non-illustrated campfire programs at Indian Creek four nights per week (2538); nightly campfire programs at the Mammoth Campground (5407). At the request of the Yellowstone Park Company talks were given in the Mammoth Motor Inn three nights per week (4748). If staff time were available, all activities given on a partial schedule could be given every night with good attendance. 92,000 Mammoth Trail Guides were used by approximately 349,600 visitors. 12,577 contacts were made by roving naturalists.

Tower Falls: Two seasonal naturalists served the Tower Falls area. Campfire programs were presented nightly at the Tower Campground to 4461 visitors. The Fossil Forest hike was given three times per week to 636 people. If this activity continues to increase in popularity, it may be necessary to put it on a reservation basis. 28,325 contacts were made by roving naturalists.

Mt. Washburn Lookout: A man and wife team was hired this year to man the Mt. Washburn fire lookout so that visitors could enter the tower and more attention given to interpretation. Contacts were made with 10,120 visitors.

II. INTERPRETATION AND RECREATION MANAGEMENT (Continued)

A. Interpretive Program

1. General Interpretation (Continued)

Canyon: The visitor center was open daily from May 14 through October 14, with a total of 261,700 visitors. 2617 audio-visual presentations were viewed by 261,700 visitors. Naturalists conducted activities and respective total attendances as follows: Canyon Walk, 12,218; Clear Lake Walk, 676; 1000' Scramble, 1097; Campfire Program, 11,000; Children's Environmental Program, 1567; and roving contacts, 27,973. The interpretive staff at Canyon consisted of nine seasonal naturalists including one supervisor and one assistant supervisor.

Fishing Bridge - Bridge Bay: The interpretive staff included ten seasonal naturalists including one supervisor and one assistant supervisor. Campfire programs were held at Bridge Bay. The Fishing Bridge Visitor Center was open daily from May 27 through September 9, serving a total of 172,463 visitors. Naturalist conducted activities and respective attendances follow: Pelican Creek Walk, 4283; Storm Point Walk, 2364; Avalanche Peak Hike, 788; Fishing Bridge Campfires, 45,035; Bridge Bay Campfires, 34,811; Children's Environmental Program, 2020; and roving contacts, 29,096. Approximately 66,500 Mud Volcano booklets were dispensed serving an estimated 252,550 visitors.

One of the more significant changes in the Fishing Bridge area this year was the closing of the first mile of the Yellowstone River below the lake outlet to fishing. Naturalists were on the bridge daily interpreting the life history of the fish and their role in the total aquatic ecosystem. A series of three new exhibits were mounted on the bridge to aid in telling this story. Most revolutionary, however, was the installation of a cassette television system. A color movie of the life history of the Yellowstone cutthroat trout was transcribed to color video-tape. Technical difficulties were experienced in obtaining a quality picture, which will be corrected.

II. INTERPRETATION AND RECREATION MANAGEMENT (Continued)

A. Interpretive Program

1. General Interpretation (Continued)

Grant Village: The interpretive staff included seasonal naturalists including one supervisor. Visitor Center was open daily from May 1 through September 9 serving a total of 90,170 visitors. The audio-visual program was presented 17 times and viewed by 30,722 visitors. Naturalist programs and activities with respective total attendance: Lakeside Walk, 1614; Campfire Program, 11,658; Children's Environmental Program, 1011; and roving campfires, 10,762. The audio chairs in the exhibit room continued to be very popular being used by 43,448 visitors. The lakeside exhibit message was heard by 14,830 visitors.

Old Faithful: The numbers shown in parentheses indicate total attendance for the year.

The Old Faithful Visitor Center was open from late April through October. Interpretive programs originating in the Old Faithful area consisted of the following: a nine-minute movie, "Yellowstone, A Living Sculpture," (338,000) shown almost continuously between 9 a.m. and 5 p.m. daily in the two satellite theaters; nightly slide programs at the Madison Amphitheater (23,000); Yellowstone Forum series held nightly except Wednesday (4800); half-day Forked Basin Hike held three times weekly (1000); half-day Upper Geyser Basin Walk held daily (4000); 1 1/2 hour daily Black Sand Basin Walk (3400); 30-minute daily Old Faithful Trail Hike (2900); twice weekly 1 1/2 hour backpacking demonstration at the Madison Amphitheater (1200); weekly (July only) fly-fishing demonstration at the same amphitheater (800); and a 3/4 hour daily Madison Children's Walk (1000).

The Twilight Geyser Walk began at Castle Geyser located at the visitor center. As a result, the walk was often "over-subscribed." The highly successful Yellowstone Forum, which originated in 1972, encouraged audience participation by discussing park policies dealing with bear, fish, forest fire management,



II. INTERPRETATION AND RECREATION

A. Interpretive Program

1. General Interpretation (0.1 - 1)

master plan and wilderness proposal. Basin Walk was unsuccessful due to "eruptions" of major eruptions. This activity will be replaced by the Basin to visitor center walk which was done in August.

A Wildlife Motocycle (1950) was successful each evening from just after dark. Although wildlife sightings were generally good, visitor reception was enthusiastic. A radio transmitter (1510 KC) mounted on the car and the interpretation of an ecological aspect of wildlife.

Fountain Paintpots (97,000); the upper (139,000); and the free Old Faithful (658,000).

Summer staff consisted of 15 naturalists (10 permanent employee), four information receptionists, and one association employee. The 1973-74 staff made up of four individuals including Frederick Hutchinson, who became the park's only geothermal technician (on furlough position) in October; this is an increase over the 1972-73 winter staff.

Winter interpretive activities consist of 10 nightly programs at the visitor center and 1 winter discovery walks on Upper Hill twice daily. The visitor center is open from December through mid-March.

In February, a weather exhibit and two winter exhibits were installed in the visitor center lobby. In September, a seismograph exhibit was added to show earth activity.

II. INTERPELLATION ANDA. Interpretive Problems

1. General Introduction

Hourly traffic counts were made for the period June 3-5, visitation for June 5 and the average for July and August. We found that 30% of the (18) viewed "Pinnacles" walked as far as Castle Geyser, 30% walked at least to the Pinnacles Trail, and slightly more to the Nature Trail.

The two outside buildings of the station is continued generally to be used for the same official embassiment. The building is used in the visitor center for the first time although it is still the second board located near the oldest office remains unusable. The general electronic equipment in the visitor center was generally more dependable than the

Madison: The Explorer Inn, which opened May 15, 1964, and September, continued to be successful. It had a few occasional VIP. Estimated gross for 1964 is \$20,000.

Norris: Open from mid-May thru mid-September. The Norris Museum (105,000) is the largest in the area since being completely renovated. Various activities continue to be conducted. The museum is a naturalists and educators center. The museum has talks at the Norris Center and the museum (100), and unscheduled 20-45 minute talks (100) at the museum. Six two-hour hikes (100) were taken and trails lead into the trails. One Hundred Plains area.

1. Interpretive Program

2. Environmental Education

The first teacher workshop in environmental education sessions were held at Old Faithful in April and at Mammoth in September. Five school systems were involved. Cooperative activities with the U.S. Forest Service, U.S. Conservation Service, Montana State University, and the State of Montana were initiated for teacher training. The park is presented as the State's Committee to develop a State Plan for environmental education in Montana. An agreement has been reached with Montana State University to co-sponsor environmental field studies in the park next summer.

3. Yellowstone Library and Museum Association

The YLMA made a gross income of \$142,464, a net of \$40,468, and donated \$31,643 as aid to the National Park Service. This aid included the printing of over one million pieces of free park information, operation of the park research library, purchasing U.S. Army uniforms for living history, refinement of the roadside AM radio system, and development of an underwater TV film and exhibit for Fishing Bridge. Funds are being accumulated to publish The Yellowstone Story, by historian Aubrey Haines.

II. INTERPRETATION AND RESOURCES MANAGEMENT (continued)

B. Resources Management

The park was short nearly four inches of precipitation for the year, with late summer and fall the only period above or near normal. Temperatures stayed very close to normal, with April showing the only significant departure below average. The light snowfall permitted a relatively easy opening of the park roads in the spring, and allowed a wide dispersal of ungulates on the winter range.

The final Environmental Impact Statement for the Wilderness Proposal was completed and made available to the public in May. The Wilderness Proposal, sent to Congress in September, 1972, has received no action as yet. The final Environmental Impact Statement for the Master Plan has not yet been made available to the public, although the Master Plan document is complete.

Overnight use in the back-country increased by 27% over 1972. The permit system with designated campsites is working well and giving managers an accurate index of use. The form of the Back-Country Use Permit will be changed in 1974, but the system will remain unchanged.

For the first time in seventeen years, there was neither a grizzly bear killed in the park nor a visitor injured by a grizzly. Only ten management actions were required to remove grizzlies from developed areas. Four injuries, all roadside, occurred from black bears. A summary of bear management activities is included in the annual report for this subject submitted in December, 1973.

The only change in fishing regulations proposed for 1974 will give the Superintendent the authority to temporarily close seasons on species of fish as well as waters for spawning or research purposes. The closure of the first mile of the Yellowstone River below the outlet, which included Fishing Bridge, went much smoother than expected with practically no objections by fishermen. The television tape players, installed on the bridge to show movies of cutthroat spawning, were well received by the public.

II. INTERPRETATION AND RESOURCE MANAGEMENT (continued)

B. Resource Management (continued)

Because of the mild winter, there was no significant movement of elk outside the north boundary of the park, so no hunt could be scheduled in Montana. The current population of the north herd is estimated at over 12,000.

Despite one of the most active fire seasons in the past ten years, only one statistical lightning fire occurred in either of the non-suppression zones that were established in 1973. This fire went out in two days and burned less than 1/4 acre. Suppression action was taken on 23 lightning caused fires and eight man caused fires which burned a total of 151 acres, all within Yellowstone National Park.

A total of 14 structural fires occurred in Yellowstone National Park in 1973. Losses totaled \$92,000. The bulk of this loss (\$89,000) was incurred by the Yellowstone Park Company when the campers laundromat and shower building at Old Faithful was extensively damaged by fire on July 14. No structural fires have occurred in National Park Service buildings in 1972 or 1973.

Forestry operations continued in much the same manner as in the past with the exception of the assumption of the responsibility of Insect and Disease surveys within Yellowstone National Park. Region 1 of the United States Forest Service has conducted these surveys in the past. The Forest Service will now provide the necessary funds and Yellowstone personnel will conduct the surveys.

The Soil and Moisture program continued the spraying of Dalmation Toadflax in Mammoth and the encouraging development of the biological agent Calophasia lunula.

II. INTERPRETATION AND RESOURCE MANAGEMENT (Continued)

C. Visitor Protection and Management

The general crime picture remains relatively unchanged over the past several years. Thefts from parked cars and unattended campsites still rank as the major problem. Thefts were up 25% from 1972 while travel was down almost 50% for the same period. The use of dangerous drugs continues to appear among the younger employees and visitor groups. This activity, however, appears to be a lessening problem. The drug problem in the surrounding communities also seems to be fading.

1973 marked the second year for the use of the servicewide citation-bond system in Yellowstone. The number of citations issued in 1972 has decreased from over 800 to a total of 558 for 1973. This represents a level very close to that which existed under the old bond system. The Law Enforcement Office has continued to function as the clerk for the court in the processing of the citations. With the implementation of the new computerized record keeping system, which necessitates more coding and handling, time spent in this function will increase.

Law enforcement skills training continues to be a sub-district responsibility with assistance from the Law Enforcement Office. Approximately 50 man-days of instructor time and 200 man-days of student time was spent in area law enforcement training. This training included presentations by the U. S. Attorney, F. B. I. Agents and local Narcotics Agents. In addition, three Rangers were sent to the Basic Law Enforcement School in Washington, D. C.; five Rangers attended Advanced Law Enforcement Schools at Montana State University and two Rangers attended Law Enforcement Schools in the Regional Office.

The problem of the drinking driver has met increased success in prosecution. The use of blood alcohol analysis has resulted in the prosecution of drinking drivers involved in motor vehicle accidents with a 100% conviction rate. Previously, these drivers would not have been successfully prosecuted. In general, efforts to curb crime and detect criminal activity have been successful through a combination of patrol activity, increased training and the use of modern technology including the National Crime Informational Center (NCIC) computer and blood alcohol analysis. Many crimes, however, will continue undetected because of the transient nature of Yellowstone's summer population.



II. INTERPRETATION AND FACILITIES MANAGEMENT (Continued)

C. Visitor Protection and Management (Continued)

Entrance stations were generally in operation from the first of May through the end of October. Only one station (North) was operated twenty-four hours per day during the peak of the summer season. The others were operated from fourteen to twenty hours per day.

Summary of Fees Collected

<u>Station</u>	<u>Short Term</u>	<u>Golden Eagle Passport</u>	<u>Total</u>
North	\$ 80,160	\$ 25,980	\$106,140
Northeast	44,076	18,490	62,566
East	200,332	120,690	321,022
South	42,481	1,920	44,401
West	<u>219,891</u>	<u>63,950</u>	<u>283,841</u>
TOTAL	\$586,990	\$231,030	\$818,020

In addition to fees collected from Short Term Permits and Golden Eagle Passports, 13,176 Golden Age Passports were issued free of charge to persons age 62 and older.

Campground fees were collected in fourteen campgrounds during the 1973 season (twelve regular plus two group campgrounds), and the amount totaled \$204,447.

Madison and Bridge Bay Campgrounds were included in a pilot campsite reservation program which included six national parks. The American Express Reservations Company was the contractor which handled the reservations and fee collection. This program started June 15, 1973, and ended September 4, 1973. All campsites (736), less ten percent, were available for reservations. Of all available campsites, 46.6 percent were sold on the reservation system. Campsites not reserved were sold on a first-come, first-served basis. As in any newly implemented program, problems arose, most of which were resolved. Complaints as well as compliments were received. In general, the system was well accepted by the visiting public. Information on revenue collected for camping fees in Yellowstone National Park by the American Express Reservation Company and its agents is not available. The following data was furnished by the American Express Reservation Company:

II. INTERPRETATION AND RECREATION DEVELOPMENT (Continued)

C. Visitor Protection and Management (Continued)

<u>Campground</u>	<u>Field</u>	<u>Landed</u>	<u>Total</u>
Bridge Bay	19,550	3,540	1,600
Madison	4,000	500	1,100
TOTAL	19,630	4,040	2,100

Park visitation totaled 2,061,537 persons. This total reflects a decrease of 8.6 percent over the previous year.

Winter visitation, consisting primarily of persons entering the park via oversnow vehicles, totaled 39,581 persons. This total reflects an increase of 51.1 percent over the previous year, which is more than the annual winter use increase for the past six years.

The central communications center in its third year of operation functioned very well and provided valuable assistance to management and field personnel. In addition to the ongoing function of serving telephone and radio communications, the Center has been particularly helpful in consolidating relevant records and data pertaining to law enforcement activities, accidents, back-country management and bear management activities. The Center this year also contained the reservation terminal for the campground reservation system being tried in two of our major campgrounds.

II. INTERPRETATION AND RECREATION MANAGEMENT (continued)

D. Historic Preservation

Grant-Kohrs

An additional 74 acres in fee were acquired to protect the wildlife habitat along the river and 100 acres in scenic easement were added to protect the road from commercial development which might detract from the historical integrity of the area. The total acreage now includes 204 acres in fee and 1,200 acres in scenic easement.

The roof on the large ranchhouse was replaced to protect the building and artifacts from further damage by weather.

An Environmental Impact Statement was prepared for the Area Master Plan and has been submitted to BLM for review.

A Management Assistant position for the area was approved and a certificate of eligibles has been requested.

E. Sign Program

A vacuum sign applicator was obtained and put into use rehabilitating reflective traffic control signs. Signs were installed on the new West Thumb bypass road.

Planning is in progress for adding metric distances to non-related road signs. The first phase will be conversion of park elevation signs.

All interpretive literature now indicates distances in both miles and meters.

II. INTERPRETATION AND RESEARCH DEPARTMENT (Continued)

F. Research Accomplished

Biological studies accomplished by the Yellowstone staff follow as Appendix VI - IX:

- Appendix VI - Ecology of Bison - Mary M. Clark
- Appendix VII- Elk Ecology Studies - Douglas Houston
- Appendix VIII Animal Ecology Studies - Glen Cole
- Appendix IX Plant Ecology Studies - Don Despain

. ECOLOGY OF BISON
(YELL-N-8b)

INVESTIGATOR: Mary Meagher

OBJECTIVES: Project 1.--a) To provide more information on bison population dynamics and environmental relationships; b) to determine the extent to which natural means will regulate population numbers. Project 2.--To provide a comprehensive "ecological history" of Yellowstone's early years for: a) Additional historical data on bison populations; b) for other research problems, as needed.

METHODS: Project 1.--Continued extensive field observations will be made by all possible means. Aerial observations are essential for census, classification, and distribution information. Ground observation work will provide more detail on population and environmental factors. Work on vegetation trends continues with use of historical data and photographs. Project 2.--A punch card system of tabulating historical information is in use. Published accounts and a great volume of unpublished material (primarily Yellowstone archive and research library sources) are being systematically searched. Historical photos have been located, retaken, and filed by geographical location.

RESULTS AND DISCUSSION: Project 1.--The Mary Mountain population unit is still in a marked increase phase after termination of reductions in 1966. However, reestablishment of a significant west side summering population has not yet occurred. By comparison, the Lamar population (reductions terminated in 1965) continues to increase very slowly. Winters continue to be mild, especially on the northern range--a severe winter parkwide is needed to answer some questions. Total population estimate for early winter is 850.

Although only indirectly related to the research work, the bison-brucellosis controversy should be mentioned. Perhaps 10% of my time this year (25% in 1972) has been spent on gathering information, preparing statements, and handling correspondence related to the pressure by livestock interests-USDA brucellosis eradication program personnel to "sanitize" the Yellowstone bison.

Project 2.--Tabulation of ecological information from Army scout diaries and reports which span 1897-1916 has been completed. Approximately four volumes (of 20) of the Army station record books



and some miscellaneous accounts are done. Use of Aubrey Haines' files for location of sources is complete. A better assessment of the size of the job leaves me with a 10% estimate for material worked to date.

Several things are emerging from the tabulation to date. Moose were not wintering on the northern range in early park history--they arrived approximately about 1915. Red foxes were once much more numerous in the park interior. There was a beaver "high" about the turn of the century, and a wolf "high" perhaps 1915-1920. Cougars were common; they preyed predominantly on elk. There was an impressive grizzly bear population in the upper Lamar country. No attempts at interpretation of these occurrences will be made until the tabulation is finished. The collective efforts of all of us will be necessary for this.

One hundred fifty historical photos (exclusive of the northern third of the park) have been located, retaken, and mounted. Captions are not yet complete, and there are perhaps half a dozen photos still to retake. The increase in forest cover, parkwide, is one of the most obvious changes shown by the photos. Lack of change in vegetative cover on some sites is equally striking.

PLANS FOR 1974: Project 1.--Plans are similar to those of last year. Work will continue on population dynamics, habits and distribution as the population continues to increase toward K (particularly the Mary Mountain segment), and natural regulatory factors.

I anticipate that the brucellosis controversy will continue to absorb time and energy.

Project 2.--A few historic photos remain to be retaken--these will be completed. The search of presently available photo collections is done; the Haynes collection remains an untouched mine.

Effort will continue to be concentrated on tabulation of historical information from unpublished sources--these are generally least available to other persons. I anticipate finishing the remaining 16 Army station records (some have very little information).

Field work necessary to "make sense" of the early information will continue.



PUBLICATIONS: For reasons beyond my control, the following is
 still pending:

Meagher, Mary. 1973 ? The bison of Yellowstone National Park:
past and present. Scientific Monographs. No. 1. Nat. Park
Serv. Govt. Printing Office, Washington, D. C.

Two Yellowstone National Park Information Papers were revised:

"Brucellosis in Yellowstone bison--the controversy" No. 14 (rev.)

"A boundary control program for Yellowstone bison."

ELK ECOLOGY STUDIES, YELLOWSTONE NATIONAL PARK
(YELL-N-29b)

INVESTIGATOR: Douglas B. Houston

OBJECTIVE: To test research hypotheses relating to elk habitat relations, biotic succession, interspecies relations, and ecological homeostasis to determine if or to what extent different portions of the northern Yellowstone elk require management.

METHODS: The hypotheses under investigation, methods of evaluation, criteria for rejection, and some preliminary interpretations have been presented elsewhere (Houston 1971).

RESULTS AND DISCUSSION: Evaluations of these hypotheses have continued (Houston 1973a, b). The history and population dynamics of the northern Yellowstone elk have been reviewed (Houston 1973b). A number of premises used in support of past herd reductions (the park was not historical elk winter range, the elk herd erupted to 35,000 following establishment of the park, the herd crashed to 11,000 in the winter of 1919-20 with concurrent range destruction) have not been supported by the reviews of historical information. The demographic characteristics of the population (numbers, natality, mortality, composition, age structure, dispersal, etc.) have been described for the different herd sizes which resulted from human predation (i.e., hunting removals outside the park; herd reductions inside the park). The hypothesis to allow segments of the northern herd wintering in the park to be "naturally regulated" has not been rejected--and artificial regulation of those segments has not been recommended. Management recommendations have been submitted annually for consideration by the Montana Fish and Game Commission for herd segments wintering outside the park. To date these have not been implemented because of low numbers of elk wintering outside park boundaries.

PLANS FOR 1974: Continue studies of ungulate habitat relations, social organization of elk, winter distribution of ungulates, forage utilization, and range trends. Begin analysis of plant succession and range trend as documented by historical photos and early range measurements.

PUBLICATIONS:

Houston, D. B. 1971. Status of research on ungulates in northern Yellowstone Park. Unpubl. ms., Yellowstone National Park.

_____. 1973a. Wildfires in northern Yellowstone Park. Ecology 54:1111-1117.

_____. 1973b. History and demography of the northern Yellowstone elk: a re-evaluation. (in preparation)



ANIMAL ECOLOGY STUDIES IN YELLOWSTONE NATIONAL PARK
(YELL-N-38)

INVESTIGATOR: Glen F. Cole

OBJECTIVES: Project IA--To obtain basic reference information on the habits, population dynamics, and ecological relationships of managed and naturally regulated elk populations.

Project IIB--Establish systems for continued monitoring the population status and trends of representative faunal species.

METHODS: Project IA--Field observations and measurements of vegetation are made in the Gibbon, Madison, and Firehole rivers study area to document the habits, population dynamics, and ecology of a naturally regulated elk (Cervus canadensis) population.

Project IIB--Field observations of rare or endangered species are compiled and analyzed to determine if their population status and trends can be routinely monitored.

RESULTS AND DISCUSSION: Project IA. The study has continued since June of 1967. The elk population was on a year-to-year basis mainly self regulated by density-influenced intraspecific competition for space, nutrients, or mates (adult males only). These can be considered limiting factors, or K. The resulting highly age-specific mortality was compensated for (with lags) by density-influenced natality. Extrinsic influences from periodic harsh weather intensified intraspecific competition for space or nutrients, contributed to lags in compensating natality, and increased the efficiency of grizzly bears (Ursus arctos) as predators (Cole 1972).

Over ecological time, plant succession has and will continue to influence K, as available space or nutrients, and therefore elk population size (Cole 1971). Except for small areas that remained free of snow or meadow-forest ecotones which elk and an associated bison (Bison bison) population maintained in a disclimax (also called zootic climax stage), the biotic effects of these and other native herbivores did not prevent plant succession toward climax. The effects of natural fires needs further study.

The studied elk population served as food for native predators and scavengers. These included grizzly bears, black bears (Ursus americanus) coyotes (Canis latrans), mountain lions (Felis concolor), wolverines (Gulo luscus), bald eagles (Haliaeetus leucocephalus) and a remnant group of gray wolves (Canis lupus). Predation did not prevent the elk

population from being regulated by interspecific competition and from ultimately compensating for all natural mortality. Unintended effects of predators and scavengers as an interest or unit (Cole 1971) appeared to be to hasten the deaths of elk that had the lowest existing energy reserves and thereby deepen elk population fluctuations. Such culling also contributed to maintaining most adult female elk at prime breeding ages (probably 10 years or less) and a relatively high yearly production of young (usually about 50 calves/100 females going into winter).

Project IIB--Data from field observations of grizzly bears, gray wolves, bald eagles, mountain lions, and wolverines has been compiled for reference use. The accumulated data on gray wolves, mountain lions, and wolverine are in research notes by Cole (1971) and Houston (1972). Preliminary information from research to establish methods to monitor the population status and trends of bald eagles and ospreys (Pandion haliaetus) is reported by Swenson (1973). Data on grizzly bears is used in a series of research notes, conference papers, and publications since 1968. See Cole (1973a) for the information through 1972.

An Interim Report (Cole 1973b) that has been submitted for publication uses observation and life history data to calculate the size and trends of the park's grizzly bear population. Observations over an additional number of years are needed to determine if this method can be routinely used.

PLANS FOR 1974: Continue research on the Gibbon, Madison, and Firehole rivers study area and the development of routine systems to reflect the population status and trends of rare or endangered species.

LITERATURE CITED:

- Cole, G. F. 1971. An ecological rationale for the natural or artificial regulation of native ungulates in parks. Trans. of 36th N. Amer. Wildl. and Natur. Res. pp. 417-425.
- _____. 1971. Yellowstone wolves (Canis lupus irremotus). Res. Note No. 4, Yellowstone Nat. Park. 6 p. (mimeo.)
- _____. 1972. Grizzly bear-elk relationships in Yellowstone National Park. J. Wildl. Mgmt. 36(2):557-561.
- _____. 1973a. Management involving grizzly bears in Yellowstone National Park, 1970-72. Res. Rpt. No. 7, National Park Service. Govt. Printing Office. 10 p.

PLANT ECOLOGY STUDIES
(YELL-N-39)

INVESTIGATOR: Don G. Despain

OBJECTIVES: I.--Research leading to publication and describes natural units of plant communities and documents successional processes for major plant species and vegetational units. II.--Research leading to publication on the ecology and trophic roles of major plant species and vegetation.

SUMMARY OF PROGRESS: This past year has been full and rewarding. The favorable research climate in Yellowstone has been able to get both my master's and doctor's theses into publication. "Vegetation of the Bighorn Mountains" appeared in Ecological Monographs, and "The Survival of Sagebrush" will appear in the Arizona Academy of Science Journal. I also worked in a synthesis of tree ring data taken from Yellowstone the past summer, which may in the end result in a publication on Yellowstone's past climate.

A paper on the recreational productivity of lodgepole pine was prepared and presented at a lodgepole pine symposium at Washington State University in Pullman, Washington, this fall. The paper will appear in the proceedings of that symposium, hopefully within the next 3-4 months.

I have also cooperated in testing the ability of ERTS A to map the vegetation of Yellowstone and am finding a little frustration in working with geologists and mathematicians. However, there is room for further investigation in this area and I will continue to cooperate.

We have embarked on a natural fire program in Yellowstone. In our second year we monitored one fire that exceeded our previous year's fire by 80 ft. We are still waiting for our big fire. In the meantime, I continue to improve research methods and procedures, and broaden and strengthen our background knowledge of past fire history.

Additionally, data has been gathered that is being worked into a paper on lodgepole pine as a nonpyrogenic climax community. Hopefully this can be submitted to an ecological journal before long.

Specimens in the Yellowstone Herbarium were boxed and sent to the Peck Herbarium where I was able to update and improve the determinations of the approximately 3000 sheets. Several species new to Yellowstone have been added to the Herbarium through my own collecting efforts and those of some naturalists with whom I am cooperating. Before spring a reliable checklist of Yellowstone flora will appear with possibly an accompanying key.

_____. 1973b. Management involving grizzly bears and humans in Yellowstone National Park, 1970-73--an interim report. (ms. for publ.)

Houston, D. B. 1972. Cougar and wolverine in Yellowstone National Park. Res. Note, Yellowstone Nat. Park. 2 p. (mimeo.)

Swenson, J. and R. L. Eng. 1973. Yellowstone National Park bald eagle-osprey study. 1973 progress report. 4 p.

OTHER PAPERS:

Cole, G. F. 1971. Some considerations in the use of exclosures to assess the biotic effects of herbivores and departures from natural conditions in Yellowstone National Park. Information Paper, Yellowstone Nat. Park. 2 p. (mimeo.)

_____. 1971. Animal ecology studies in Yellowstone National Park. Annual Report, YELL-N-38, Yellowstone Nat. Park. 5 p. (mimeo.)

_____. 1971. Progress in restoring a natural grizzly bear population in Yellowstone National Park. AAAS, Research in National Parks Symposium. 21 p. (mimeo.)

_____. 1971. Preservation and management of grizzly bears in Yellowstone National Park. BioScience. 21(16):858-865.

_____. 1972. Restoration of a natural grizzly bear population in Yellowstone National Park. Information Paper, Yellowstone Nat. Park. 1 p. (mimeo.)

_____. 1973. Management involving grizzly bears in Yellowstone National Park, 1970-72. Information Paper, Yellowstone Nat. Park. 2 p. (mimeo.)

PLANT ECOLOGY
(YELL-N-39)

INVESTIGATOR: Don G. Despain

OBJECTIVES: I.--Research leading to publication of documents successional processes for major plant vegetational units. II.--Research leading to publication of ecology and trophic roles of major plant species and vegetation.

SUMMARY OF PROGRESS: This past year has been full and rewarding. The favorable research climate in Yellowstone has been able to get both my master's and doctor's theses into publication. "Vegetation of the Bighorn Mountains of Wyoming" appeared in Ecological Monographs, and "The Survival of Saguaro" will appear in the Arizona Academy of Science Journal. I also worked in a synthesis of tree ring data taken from Yellowstone the previous summer, which may in the end result in a publication on Yellowstone's past climate.

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III. MAINTENANCE

A. Buildings

Exterior painting of 35 buildings was completed.

Facilities were winterized at Grant Village so that winter road grooming crews could be relocated from South Entrance to provide a more centrally located operation.

B. Utilities

A transistorized radio repeater was placed on Mount Washburn to replace the less reliable tube-type unit.

Wastewater facilities were completed at Beartooth, North Entrance, Northeast Entrance, and South Entrance.

Water intake structures were rehabilitated at Norris and Canyon.

C. Grounds

The regional tree planter placed 75 trees in construction scar areas in the West Thumb area. An additional 50 trees were transplanted in the Madison and Old Faithful areas.

D. Roads and Trails

Road maintenance crews accomplished 10.9 miles of sealcoat surface treatment and 4.8 miles of halfsole resurfacing.

Vista clearing along the road from Lake to West Thumb was accomplished according to the park landscape plan.

IV. OTHER

A. Energy Conservation

Yellowstone used a wide variety of means to conserve energy in 1973. The most efficient investments were in building heat losses and selective closure of trails during the cold months.

These resulted in significant reductions in the use of fuel oil, power, and gasoline during the last six months of 1973. The reduction in fuel oil use was substantial, amounting to 26.5%.

B. Special Events

First visit of the Director, National Park Service, September 1973.

Wildlife Symposium - Assistant Secretary Nelson, Bureau of Sports Fisheries and Wildlife, September 1973.

C. Media Relations and Public Affairs

A total of 45 news releases covering emergencies, awards, personnel changes and other phases of the operation was issued.

Fifteen filming permits were issued for filming within the park. The permits were divided into three categories: (1) television, (2) educational, and (3) commercial.

Tapes containing two safety messages on winter operations within the park were distributed to fifteen radio stations surrounding the park.

D. Volunteers in Parks Program

The VIP program continued with great success and enthusiasm. One hundred twenty-five volunteers contributed 4,958 hours. Types of work in which they were involved included information desk duty at visitor centers and ranger stations; assisting at campfires and on nature walks; roving campground duty; environmental programs for young children; winter snowshoe walks; fly-fishing demonstrations, conducted by Denwick Fly Fishing Club; and

IV. OTHER (Continued)

D. Volunteers in Parks Program (Continued)

backpacking demonstrations; thermal pool cleanup; boat patrol; backcountry patrol; assisting Bureau of Sport Fisheries in fishery management; and non-technical aspects of biological research such as range measurements, herbarium work, etc. It is interesting to note that two of our volunteers engaged in bird watching submitted an excellent report of their findings for our park research library.

E. Cooperation with Other Agencies

This past year two formal meetings were held with Forest Supervisors of the five surrounding National Forests and the Regional Foresters from Denver and Missoula.

The purpose of these meetings are to resolve problems across departmental lines which affect both the parks and the surrounding forests.

The Superintendent is a member of the Governor's committee entitled, REACT, which encompasses all federal and state agencies in the state of Wyoming. The purpose of this committee is to attempt to find resolutions to state and federal problems particularly in the recreational field.

The Superintendent is also a member of the Montana Governor's Committee which is similar to the Wyoming committee.

F. Accomplishment of Park Goals

Each year the preparation of goals improves. This year we have made a special attempt to omit those items that are not entirely within our control or require action by other offices before implementation can be accomplished and we have tried to eliminate those items that should more properly be included in the work program.

IV. OTHER (Continued)

F. Accomplishment of Park Goals (Continued)

In other words, we have tried to go over and above that which is our routine work program and one that would have specific commitments. Generally, we have been on schedule and for the most part, targets have been met.

G. Construction

The following construction projects were completed in 1973:

- West Thumb Bypass Road
- Five Residences for Sewage Plant Operators
located at Grant Village, Lake, Canyon, Madison
and Old Faithful.
- Sewer Outfall - Mammoth-Gardiner
- Sewer Collection Lines - West Yellowstone
- Visitor Center Roof Corrections - Old Faithful
- Wastewater Treatment Plant - Canyon
- Sanitary Boat Dumps & Piers - Bridge Bay-Grant Village

Work on the sewerage system, Lake-Fishing Bridge; Canyon Comfort Stations Sewage facilities; and Old Faithful Wastewater Treatment Plant was begun in 1973 and will resume next summer.

IV. OTHER (Continued)

H. Safety:

The safety program follows the guidelines set forth in the Documented Safety Program and the Service Management Guideline Requirements and Responsibilities which they receive upon entering the park.

With the foundation begun in 1972, the district has built vigorous safety programs. They have been able to solve many of the problems at the district level without the aid of the park. The results are quite evident from the improved safety records.

The Safety Team began an intense campaign to reduce motor vehicle accidents by holding thorough investigations and Board of Inquiries on all employee vehicle accidents. These procedures have proved to be very effective and can be seen in the reduction of accidents over last year.

The reporting system of visitor injuries has been greatly improved by the use of the II-100 card. This new system has enabled the park to expedite the accident reports much more efficiently.

A comparison of the accidents for the past two years are as follows:

	<u>1972</u>	<u>1971</u>
Visitor Motor Vehicle Accidents	481	487
Visitor Injuries	110	88
Fatalities	5	6
Employee Motor Vehicle Accidents	35	23
Employee Lost Time Accidents	9 (273 days)	10 (76 days)
Non-disabling Injuries	48	37

IV. OTHER (Continued)

I. Status of Planning

The Master Plan has been approved. However, its release to the public is withheld pending final approval of the Environmental Impact Statement.

The Wilderness Proposal has been finalized and the Environmental Impact Statement has been approved. The plan has been submitted to Congress and now awaits sponsorship for introduction along with a number of other wilderness proposals.

Work is proceeding on the Development Concept Plans for the Lake, Fishing Bridge area and Mammoth Hot Springs.

J. Big Hole National Battlefield

Superintendent Schulmeyer has furnished his annual report directly to the Regional Director, Midwest Region.

Mr. Schulmeyer has done some good work in connection with the interpretive prospectus and is making revisions to the audio-visual and self-guided trail facilities. Outside contacts have been increased to the extent possible with the limited staff available.

The FBI has been unsuccessful in the location of Chief Joseph's Peace Pipe stolen from the Big Hole Visitor Center in September 1972.

Regional Water Rights Specialist, Bill Mekeel, has been contacted regarding the water rights problems.

Preliminary thought has been given by the Superintendent and this office concerning activities that might be appropriate for the Centennial of the Battle of Big Hole, which will occur August 9 - 10, 1977.

IV. OTHER (Continued)

K. Christian Ministry

"A Christian Ministry in Yellowstone" is an interdenominational ministry serving the Protestant and Roman Catholic visitors and workers. 40 seminary and college students worked in the park under the direction of Pastor Merv Olson.

The students provided services of worship at the major locations in the park with a total attendance of 18,000 persons.

A winter ministry was begun this fall in the Old Faithful area with the placement of an intern, Mr. James Frisbie, at Snow Lodge.

Weekly services of worship are now offered on a year around basis at Mammoth and Old Faithful.

SEPARATION SHEET

Yellowstone NP

Archives

Type and Number of Item(s) (map, newspaper, clipping, photograph, etc.)

7 Black + white Photographs (see photographs)

Description of Item(s) (include dates, names, topics, etc.)

6 scenes of snowmobiles, snowmobiles
+ larger presentation

Condition of Item(s)

fair - some brown labels
and spiral binding holes

Item(s) Originally Filed (specific location: room #, unit #, shelf #, collection name, box #, folder #, etc.)

1974 Superintendent's Annual Report

Item(s) Now Filed (specific location: room #, unit #, shelf #, collection name, box #, folder #, etc.)

Museum - photo archives

Separated by (name, title, and office)

H. J. Cherry

Separation Date:

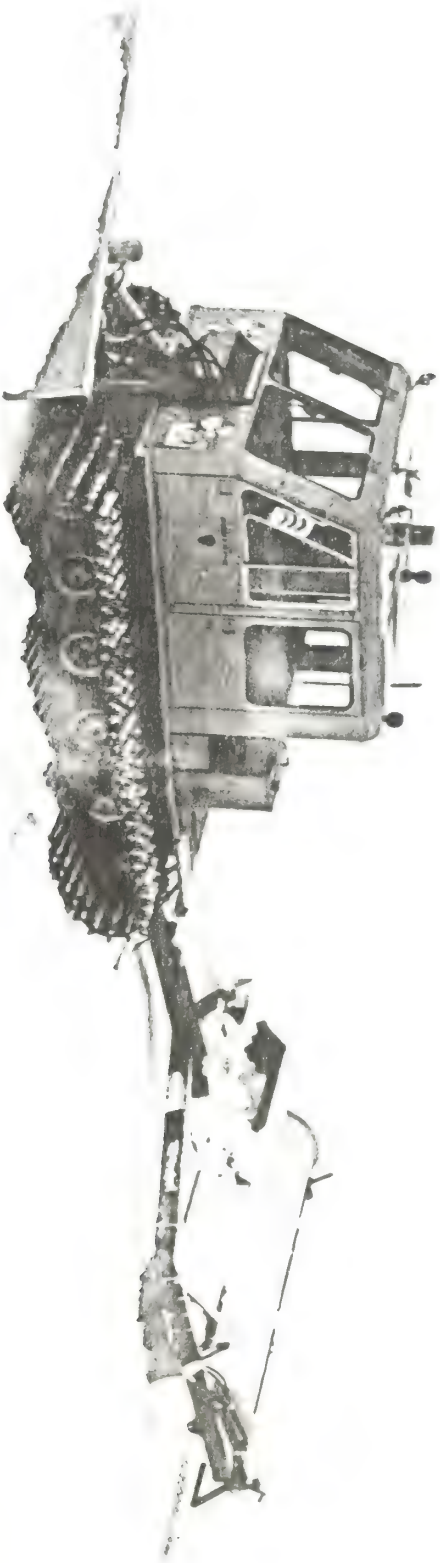
7-29-63





ROAD GROOMING

Large tracked oversnow vehicle with groomer attached used to prepare unplowed roads for snowmobiling.

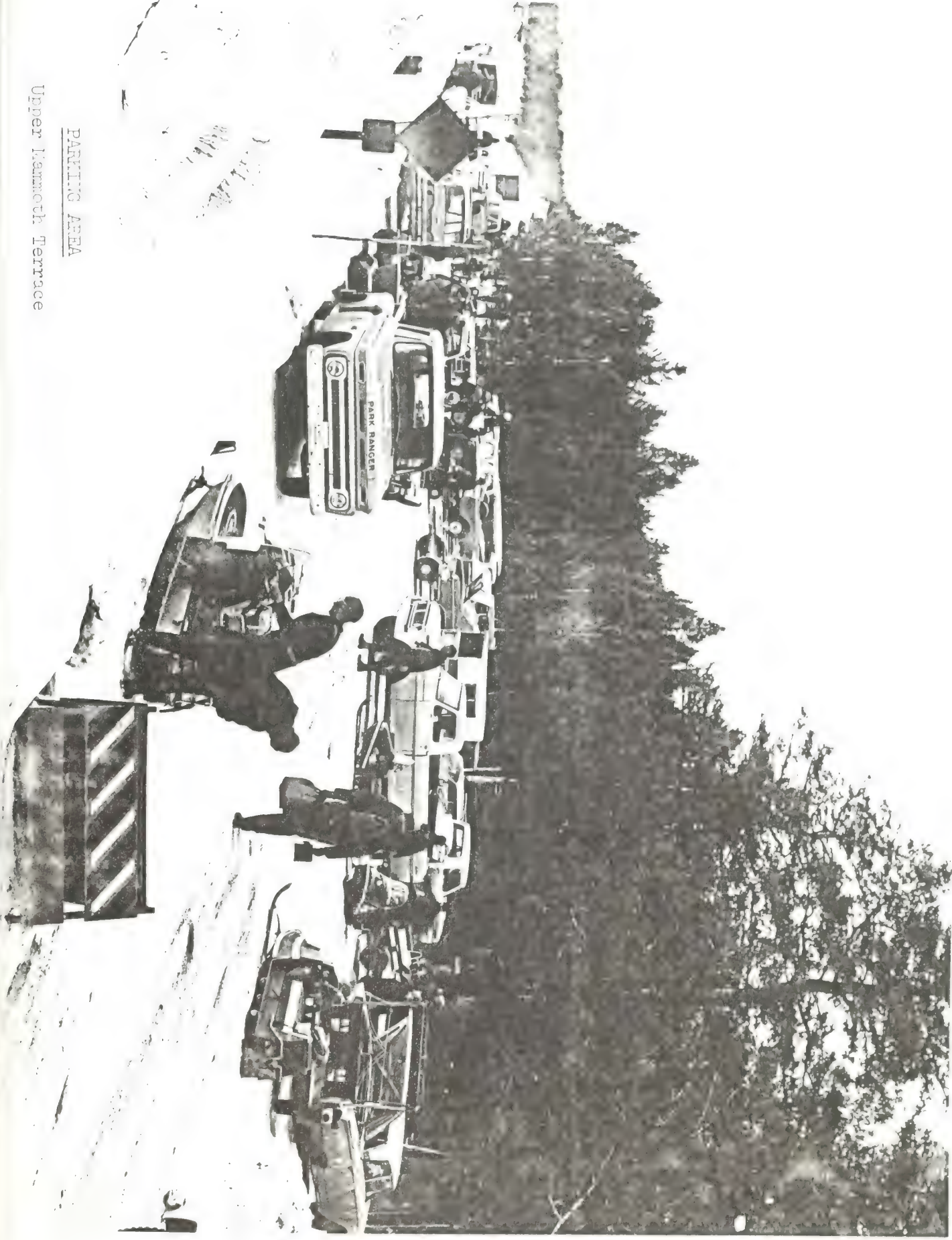




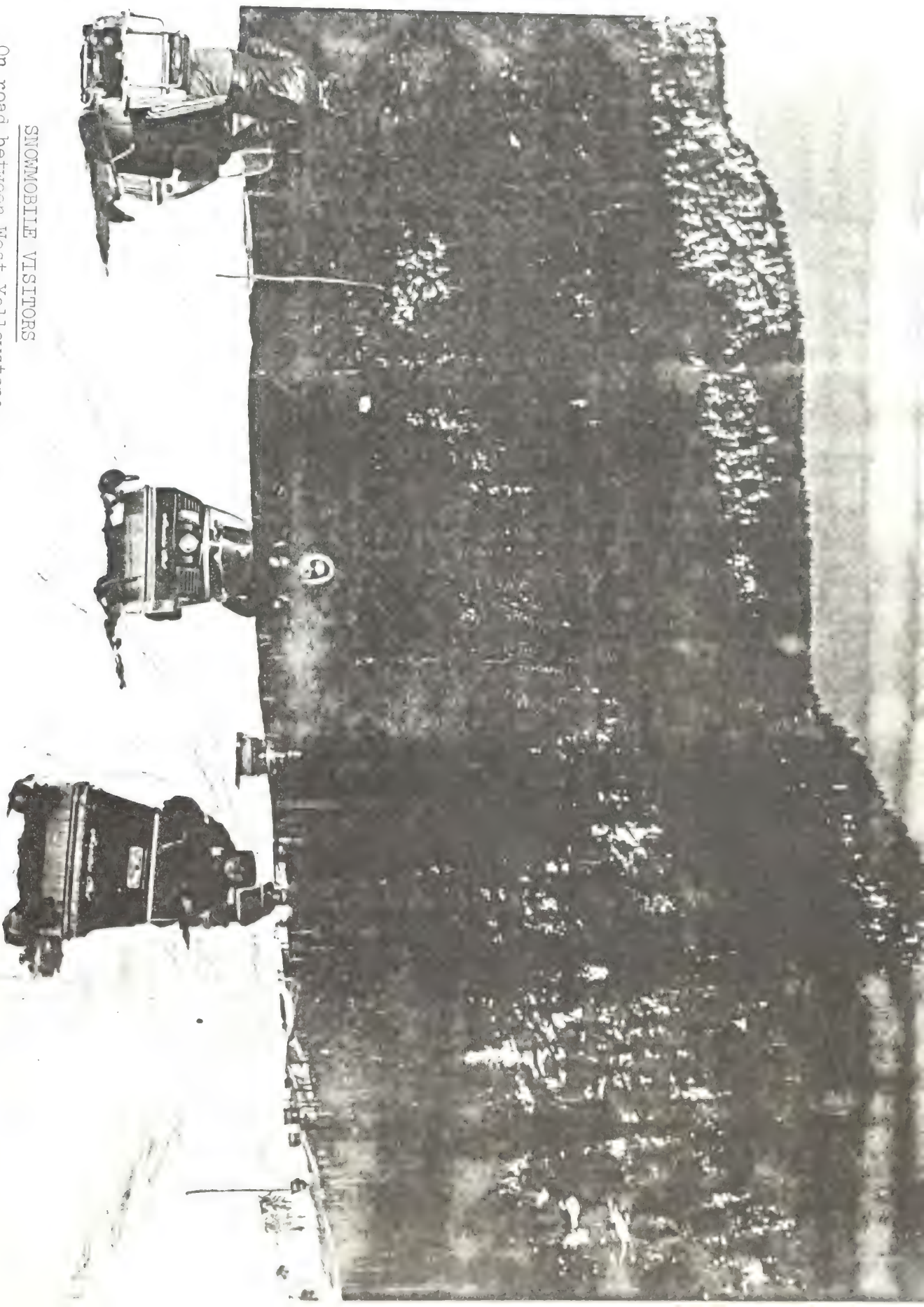
LUTHER WILKINSON, JACK K. ALDERSON AND
 REGINALD C. B. MORTON,
 At Madison Junction
 Yellowstone National Park

Upper Lammoth Terrace

PARKING AREA

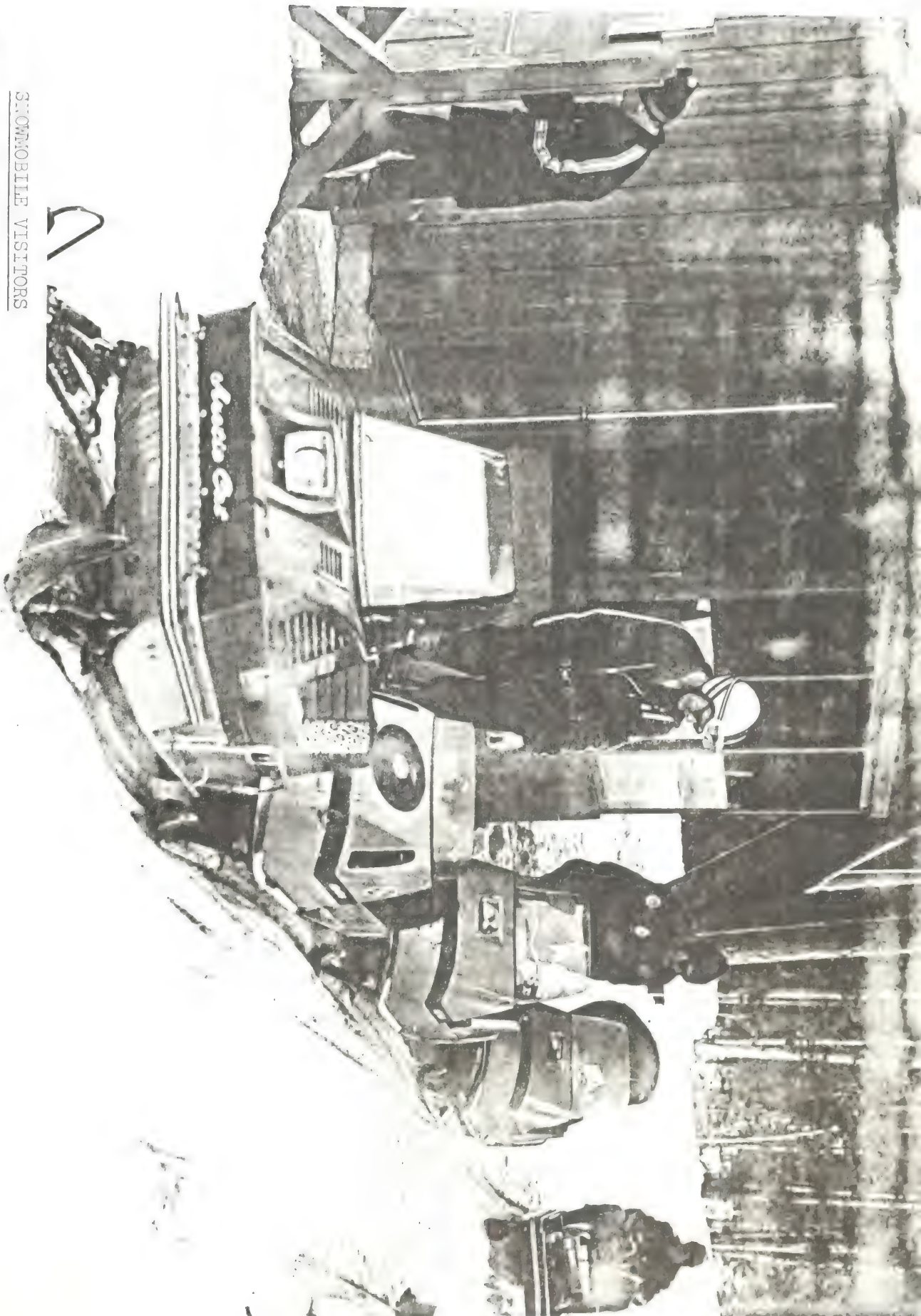


SNOCMOBILE VISITORS
On road between West Yellowstone
and Madison Junction.



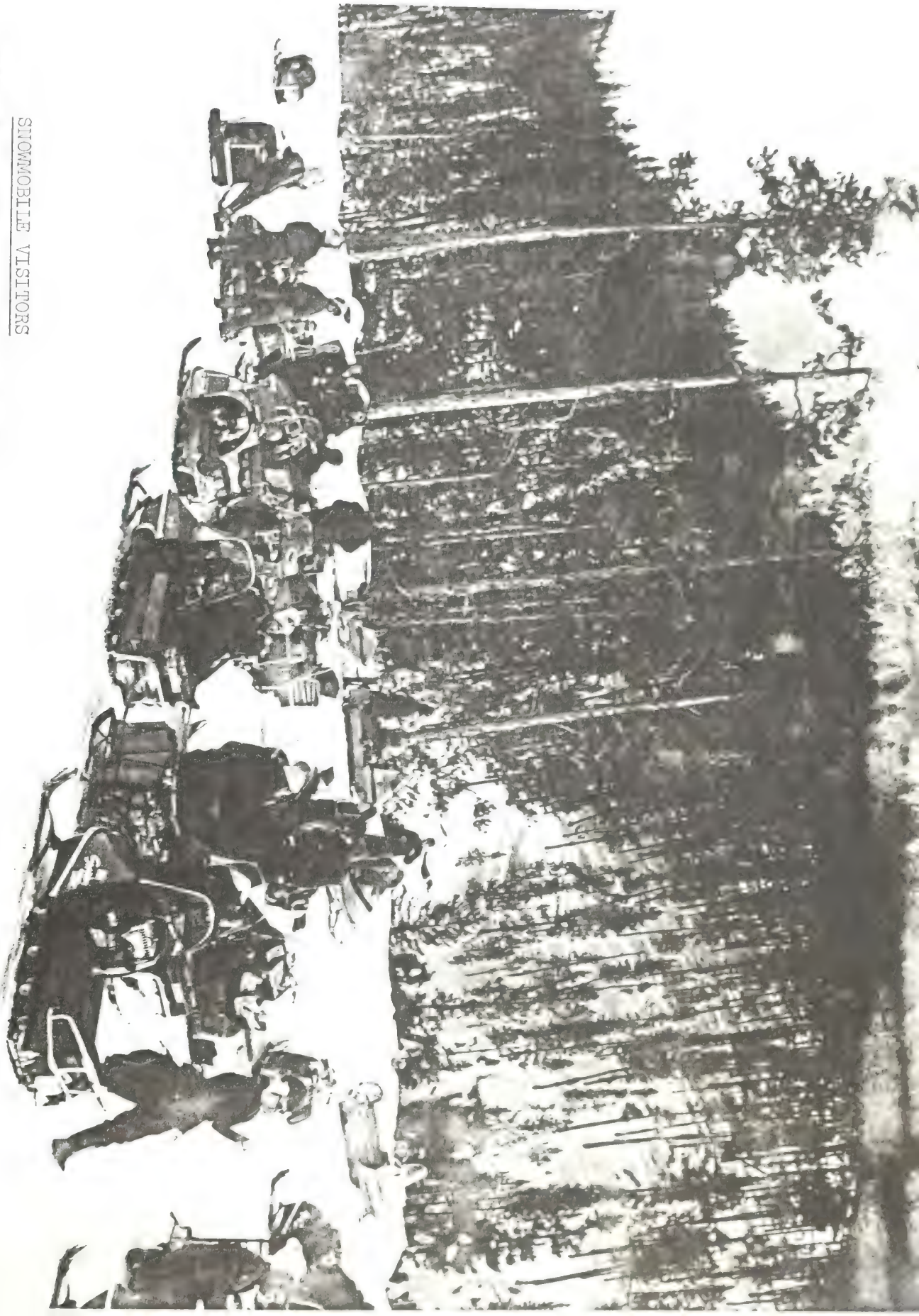
SNOWMOBILE VISITORS

Registering at West Entrance Station
before entering park.



Taking a rest break at Gibbon Falls

SNOWMOBILE VISITORS





FT. YELLOWSTONE WALK

Visitors listening to interpretive
talk by Ranger Naturalist in 1902
Uniform.



GHOST TREES - NORRIS GEYSER BASIN
YELLOWSTONE NATIONAL PARK



1974

A-N-N-U-A-L R-E-P-O-R-T

of the

S-U-P-E-R-I-N-T-E-N-D-E-N-T

Y-E-L-L-O-W-S-T-O-N-E N-A-T-I-O-N-A-L P-A-R-K

NON - CIRCULATING BOOK
MUST BE USED IN LIBRARY

YELLOWSTONE
NATIONAL PARK
LIBRARY

9295

Jack K. Anderson
Superintendent

January 31, 1974⁵

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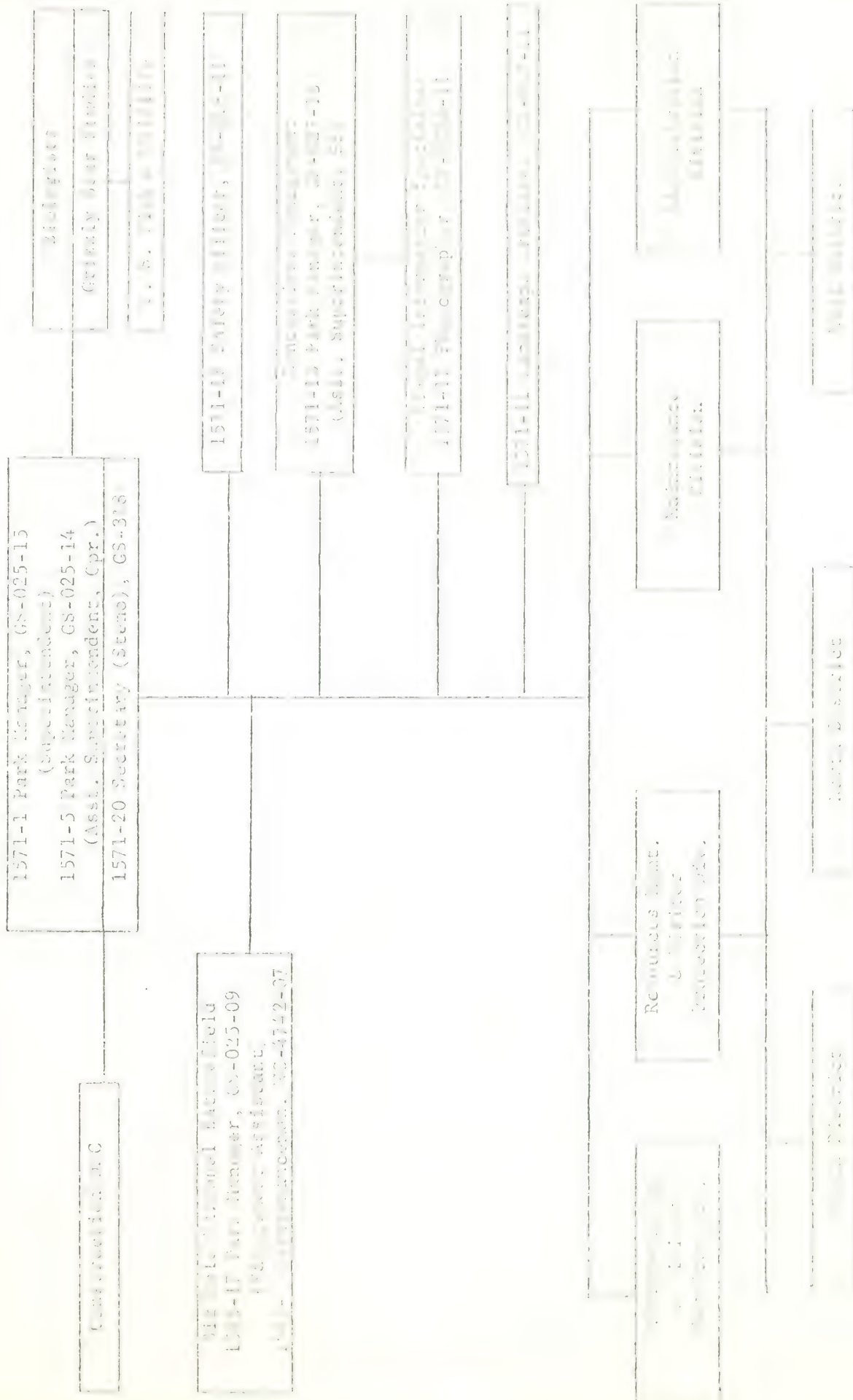
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102 Permanent Positions





I. General

A. Introduction

The purpose of this document is to provide a comprehensive overview of the project's objectives, scope, and the roles and responsibilities of the team members. It also serves as a reference for the project's progress and outcomes.

The project is a collaborative effort between the various departments of the organization, with the goal of improving the efficiency and effectiveness of the current processes.

B. Aims

The primary aim of the project is to identify and implement the most effective and efficient methods for achieving the organization's goals. This will be achieved through a series of workshops, seminars, and training sessions.

C. Underlying Principles

The project is based on the following principles: 1. The project is a continuous process, not a one-time event. 2. The project is a collaborative effort, not a top-down initiative. 3. The project is a learning process, not a knowledge transfer exercise. 4. The project is a process, not a product.

D. Project Organization

Project Organization - Information Systems - 1990

General Management & Administration (including research, development, and training, etc.)

Information Systems

Research & Development

Manufacturing & Production

Marketing & Sales

Human Resources



1. General Information

a. Object of the Contract

The object of the contract is the maintenance and repair of the park grounds, including the planting of trees and shrubs, the maintenance of lawns, and the cleaning of paths and drives. The work is to be carried out in accordance with the specifications and standards set out in the contract documents.

The work is to be carried out in accordance with the specifications and standards set out in the contract documents. The contractor is to be responsible for the procurement of all materials and labor required for the work.

In addition to the work specified in the contract, the contractor is to be responsible for the maintenance of the park grounds in general, including the removal of weeds and the maintenance of the appearance of the park.

Preparation of material for amendment to the Company's contract was initiated during the year and a draft proposal of the proposed amendments is being prepared for review.

2. Financial Information: The total cost of the contract is \$100,000. The cost of the work is to be paid in installments, with the first payment of \$25,000 being made upon the completion of the first quarter of work. The cost of the materials and labor is to be paid in accordance with the schedule of payments set out in the contract documents.

3. Performance Information: The contractor has completed the work in accordance with the specifications and standards set out in the contract documents. The work has been carried out in a timely and efficient manner, and the results have been of a high quality.

4. Conclusion: The work has been completed in accordance with the specifications and standards set out in the contract documents. The contractor has performed well, and the results have been of a high quality.

II.

A.

The following information was obtained from the records of the Department of the Interior, Bureau of Land Management, regarding the land in question.

The land in question was originally owned by the United States Government, and was later conveyed to the State of California. The land was then conveyed to the City of Los Angeles, and is now owned by the City of Los Angeles.

The land in question is located in the City of Los Angeles, and is bounded by the following streets: North on the north, South on the south, East on the east, and West on the west.

The land in question was originally owned by the United States Government, and was later conveyed to the State of California. The land was then conveyed to the City of Los Angeles, and is now owned by the City of Los Angeles.

Consequently, the land in question is owned by the City of Los Angeles, and is located in the City of Los Angeles.



II. Yellowstone National Park

B. Yellowstone National Park

Yellowstone National Park is the largest of the national parks in the United States. It is located in the northwestern corner of the United States, and covers an area of about 33,000 square miles. The park is famous for its geysers, hot springs, and lakes. It is also home to a large number of wild animals, including bison, elk, and moose. The park is a popular destination for tourists, and is a great place to see some of the most beautiful scenery in the United States. The park is also a great place to see some of the most interesting geology in the world. The park is a great place to see some of the most beautiful scenery in the United States. The park is also a great place to see some of the most interesting geology in the world. The park is a great place to see some of the most beautiful scenery in the United States. The park is also a great place to see some of the most interesting geology in the world.

General. The National Park Service is a federal agency that manages the national parks and other public lands. The service is responsible for the protection and preservation of the parks and their resources. The service is also responsible for providing information and education to the public about the parks and their resources. The service is a great place to see some of the most beautiful scenery in the United States. The service is also a great place to see some of the most interesting geology in the world. The service is a great place to see some of the most beautiful scenery in the United States. The service is also a great place to see some of the most interesting geology in the world.

Of the many things that make the National Park Service a great place to see some of the most beautiful scenery in the United States, one of the most important is the service's commitment to the protection and preservation of the parks and their resources. The service is responsible for the protection and preservation of the parks and their resources. The service is also responsible for providing information and education to the public about the parks and their resources. The service is a great place to see some of the most beautiful scenery in the United States. The service is also a great place to see some of the most interesting geology in the world. The service is a great place to see some of the most beautiful scenery in the United States. The service is also a great place to see some of the most interesting geology in the world.



II.

Yellowstone National Park is a vast area of natural beauty and scientific interest. It is a place where the ruggedness of the mountains meets the tranquility of the lakes and the majesty of the forests. The park is a treasure trove of natural resources, and it is our duty to preserve them for the enjoyment of future generations.

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"Yellowstone. A Living Sculpture." Faithful Visitor Center's visitation was 13,471. In 1964, the center was open for the season.

Topic: The Norris Sub-Station is a small, but important, part of the park. It is a place where the ruggedness of the mountains meets the tranquility of the lakes and the majesty of the forests. The park is a treasure trove of natural resources, and it is our duty to preserve them for the enjoyment of future generations.

visitors to the park. The center was open for the season during June and July.

3. Yellowstone National Park

Yellowstone National Park is a vast area of natural beauty and scientific interest. It is a place where the ruggedness of the mountains meets the tranquility of the lakes and the majesty of the forests. The park is a treasure trove of natural resources, and it is our duty to preserve them for the enjoyment of future generations.

THE HISTORY OF THE UNITED STATES

The history of the United States is a story of growth and development. It begins with the first settlers who came to the continent in search of a new home. These settlers were faced with many challenges, including a harsh climate and a lack of resources. Despite these difficulties, they persevered and established a new society. Over time, the United States grew from a small colony into a powerful nation. This growth was driven by a combination of factors, including a strong sense of national identity, a commitment to democratic principles, and a desire for economic independence. The United States has since become a global leader in many fields, including science, technology, and culture. Its history is a testament to the power of human ingenuity and the ability to overcome adversity.

III. Summary

A. Introduction

The purpose of this study was to determine the relationship between the rate of recidivism and the rate of offenses for serious crimes. For example, the rate of recidivism for serious crimes was found to be significantly higher than the rate of offenses for serious crimes. This finding is consistent with the findings of other studies which have shown that the rate of recidivism is a function of the rate of offenses and the rate of treatment.

The results of this study suggest that the rate of recidivism is a function of the rate of offenses and the rate of treatment. This finding is consistent with the findings of other studies which have shown that the rate of recidivism is a function of the rate of offenses and the rate of treatment. The results of this study suggest that the rate of recidivism is a function of the rate of offenses and the rate of treatment. This finding is consistent with the findings of other studies which have shown that the rate of recidivism is a function of the rate of offenses and the rate of treatment.

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The results of this study suggest that the rate of recidivism is a function of the rate of offenses and the rate of treatment. This finding is consistent with the findings of other studies which have shown that the rate of recidivism is a function of the rate of offenses and the rate of treatment.

III. General Information

A. General Information

The first section of the report contains a general description of the situation in the country. It is a very short and general description of the country and its people. It is not very detailed and does not contain any specific information. It is a very general description of the country and its people.

B. Registration

The second section of the report contains information about the registration of the population. It is a very short and general description of the registration process. It is not very detailed and does not contain any specific information. It is a very general description of the registration process.

The third section of the report contains information about the registration of the population. It is a very short and general description of the registration process. It is not very detailed and does not contain any specific information. It is a very general description of the registration process.

The fourth section of the report contains information about the registration of the population. It is a very short and general description of the registration process. It is not very detailed and does not contain any specific information. It is a very general description of the registration process.

C. Fort

The fifth section of the report contains information about the fort. It is a very short and general description of the fort. It is not very detailed and does not contain any specific information. It is a very general description of the fort.

The sixth section of the report contains information about the fort. It is a very short and general description of the fort. It is not very detailed and does not contain any specific information. It is a very general description of the fort.

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Creek fence removal required 8 man-days.

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III. Summary of Findings

1. General Findings

The survey was conducted in the area of the
Road and Clematis Gulch. A total of 11.5 acres
of riparian habitat was identified. The survey
area is located on the east side of the
road.

2. Vegetation: The vegetation in the
survey area is primarily riparian. The
dominant species are *Salix* and *Alnus*.
The vegetation is in good health and
provides adequate cover for wildlife.
The survey area is located on the east side
of the road and is adjacent to Clematis
Gulch.

3. Wildlife: The survey area is
located in the riparian habitat. The
survey area is adjacent to Clematis
Gulch. The survey area is located on the
east side of the road. The survey area
provides adequate cover for wildlife.
The survey area is located on the east
side of the road and is adjacent to
Clematis Gulch. The survey area is
located on the east side of the road
and is adjacent to Clematis Gulch.

4. Management: The survey area is
located in the riparian habitat. The
survey area is adjacent to Clematis
Gulch. The survey area is located on the
east side of the road. The survey area
provides adequate cover for wildlife.
The survey area is located on the east
side of the road and is adjacent to
Clematis Gulch. The survey area is
located on the east side of the road
and is adjacent to Clematis Gulch.

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... be constructed over twelve miles.

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constructed at Cabin Creek and Howell Creek.

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10. Continuity of Functions

10.1 Definition

Let f be a function defined on a set S . We say that f is continuous at a point a in S if for every $\epsilon > 0$ there exists a $\delta > 0$ such that for all x in S with $|x - a| < \delta$, we have $|f(x) - f(a)| < \epsilon$.

Thus, intuitively, a function f is continuous at a point a if the function values $f(x)$ approach $f(a)$ as x approaches a .

Equivalently, f is continuous at a if

$\lim_{x \rightarrow a} f(x) = f(a)$.

where $\lim_{x \rightarrow a} f(x)$ is the limit of $f(x)$ as x approaches a .

For a function f to be continuous on a set S , it must be continuous at every point a in S .

B. () .

F.

(cont.) The following information was obtained from the records of the Department of the Interior, Bureau of Land Management, regarding the land owned by the United States in the State of New Mexico, and the land owned by the State of New Mexico, and the land owned by the County of Santa Fe, New Mexico.

G. Summary

The following is a summary of the information obtained from the records of the Department of the Interior, Bureau of Land Management, regarding the land owned by the United States in the State of New Mexico, and the land owned by the State of New Mexico, and the land owned by the County of Santa Fe, New Mexico.

The following is a summary of the information obtained from the records of the Department of the Interior, Bureau of Land Management, regarding the land owned by the United States in the State of New Mexico, and the land owned by the State of New Mexico, and the land owned by the County of Santa Fe, New Mexico. At the end of the season a Purinice Safety, Purinice, and the following information was obtained from the records of the Department of the Interior, Bureau of Land Management, regarding the land owned by the United States in the State of New Mexico, and the land owned by the State of New Mexico, and the land owned by the County of Santa Fe, New Mexico.

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Summary of the information obtained from the records of the Department of the Interior, Bureau of Land Management, regarding the land owned by the United States in the State of New Mexico, and the land owned by the State of New Mexico, and the land owned by the County of Santa Fe, New Mexico.

I. Write the correct form of the word in the blank.

V. CONCLUSIONS

1. THE PROBLEM OF THE FUTURE OF THE COUNTRY

The problem of the future of the country is a problem of the highest importance. It is a problem which has been discussed for many years and which will continue to be discussed for many years to come. It is a problem which has been discussed in many different ways and from many different points of view. It is a problem which has been discussed in many different languages and in many different countries. It is a problem which has been discussed in many different times and in many different places. It is a problem which has been discussed in many different ways and from many different points of view.

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Yellowstone National Park, Wyoming
December 31, 1974

EMPLOYEE	GRADE	TITLE	TITLE OF AWARD	AMOUNT OF PRIZE	DATE AWARDED	REMARKS
Nolan J. Torrey	GS-05	Park Ranger (Gen)	Special Achievement	\$200	02-04-74	
John L. Cribber	GS-06	Secretary (Steno)	Special Achievement	\$200	02-04-74	
Arnold R. Pope	GS-11	Engineering Equipment Manager	Special Achievement	\$200	02-04-74	
Robert A. Anderson	GS-11	Engineering Equipment Manager	Special Achievement	\$200	02-04-74	
Robert S. Caldwell	GS-05	Park Ranger (Naturalist)	Special Achievement	\$200	02-04-74	
John P. Fellbaum	GS-12/1	Civil Engineer (Environmental Spec)	Quality Increase	GS-12/1	02-04-74	
William D. Marshall	GS-05	Chief Photographer	Special Achievement	\$200	02-04-74	
Charles E. Williams	GS-05	Park Technician (Gen. Park Ranger)	Special Achievement	\$200	02-04-74	
Robert E. Adams	GS-05	Park Technician (Gen. Park Ranger)	Special Achievement	\$200	02-04-74	

POPULATION REGULATION IN RELATION TO K

Glen F. Cole

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Paper presented at the annual meeting of the Montana Chapter
of The Wildlife Society, Bozeman, Montana, February 22, 1974.

POPULATION REGULATION IN RELATION TO K

Glen F. Cole

Introduction

This paper uses literature sources, what I have learned from discussing concepts with others, and my own research on hunted and naturally regulated elk (Cervus canadensis) populations (Cole 1969, 1972) to develop hypotheses on what regulates animal populations when they are at or near K. Some applications to the management of wildlife populations are discussed.

The literature on population regulation is exhaustive and contains a number of different theories which are usually assumed to be contradictory. The different theories can be generally classed as regulation due to climate; abiotic and/or biotic factors; or self-regulation through competition, behavior, or population genetics. See Krebs (1972) and McLaren (1971) for recent reviews of different regulation theories. This paper does not contain any new theories or concepts. However, the two hypotheses I develop for population regulation tend to accommodate the different theories.

Some of the concepts or reference data that were most helpful in preparing the paper were in Simpson's (1967) treatise on The Meaning of Evolution; the sections on community ecology and evolution in Allee, et al. (1949); papers by Bell, Watson and Moss, Gayne and

Boyd in Watson (1970); and others by Nicholson (1933), Taylor (1934), Errington (1946), Cole (1954), MacArthur (1958), Pe'we' and Hopkins (1965), Tanner (1966), Caughley (1966 and 1970), Miller (1967), Horn (1968), Houston (1968), Krebs (1969 and 1970), and Meagher (1971). National Park Service biologists Drs. Douglas Houston, Don Despain, Richard Knight, and Mary Meagher are thanked for critical reviews and suggestions on the paper. Any errors are my own.

Fundamental Relationships

By definition, a regulating mechanism or influence causes population size to change. Changes over time can be negative, positive, or average zero. Changes in population size are expressed by

$$N_2 = N_1 + r \times N_1$$

where N_1 and N_2 are initial and subsequent population sizes, and r is a rate of increase which is births + immigrations - deaths and emigrations. Here r can be positive, negative, or average zero.

It should be noted that $r \times N$ is a rate of change which with respect to time is written

$$dN/dt = rN$$

This is the equation for exponential changes in N which is of limited use because animal populations usually do not continuously increase or decline.

A more useful equation appears to be

$$dN/dt = rN \left(\frac{K - N}{K} \right)$$

This is the equation for the familiar logistic curve which is shown with a minimum population size (M) relationship on Fig. 1. The K in this equation is commonly referred to as carrying capacity. K can also be identified by the processes or factors that limit further population growth, e.g. space, food, habitat security levels, etc. One criticism of the logistic is that it does not provide for declines to extinction if population size falls below some minimum level. According to Wilson and Bossert (1971), this can be satisfied by adding $\left(\frac{N - M}{N} \right)$ to the logistic equation, so that declines occur when N is less than M.

What the logistic equation shows is that after establishment and a period of exponential growth a population reaches an equilibrium density. Here dN/dt average zero. The shorthand expression for populations at equilibrium densities is $N = K$, recognizing that this involves fluctuations around means.

However, the K for a population may change--rapidly with such things as invasions of new competitors or predators (man can be both), severe winter weather, droughts, fires, or floods; or more slowly from geologic processes and climate-influenced plant succession. End effects can be increasing or decreasing trends in N, new equilibriums, relict population status, or extinctions.

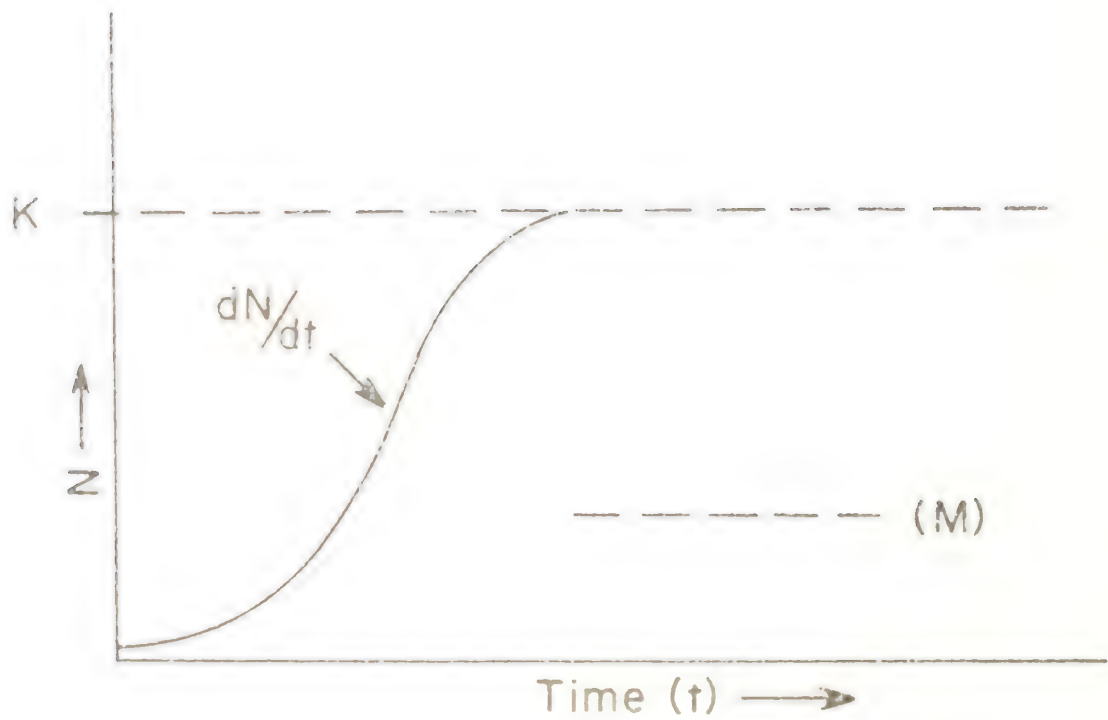


Fig. 1--Curve of dN/dt as a solution to the logistic equation with a minimum population size (M) relationship occurring after population establishment.

A diagram of K for sympatric species being influenced by climate-directed plant succession illustrates some relationships (Fig. 2). This is biological succession. At points in time when the K s of the respective species receive dual use, interspecific competition either maintains interspecies equilibriums or hastens the rate at which one species displaces another. My point here is that interspecific competition is a consequence of species diversity within a trophic level, and partial or complete displacements of species can be natural processes (i.e., not due to modern man).

Hypotheses

The preceding permits a hypothesis that the mechanism which regulates the occurrence and size of a population over long periods of time is climate, as it changes the population's K and/or the K s of competing species. Invasions of new competitors or predators (may be natural or due to modern man) that changed K for an indigenous species could occur within this time frame and not be due to climate. The hypothesis seems consistent with the fossil record and the present occurrence of once more abundant or widely distributed species as relict populations. Modern man's partial or complete displacements of native fauna--by overexploitation, appropriation of their habitats, or introductions of new species--would be recent examples of changes not due to climate.

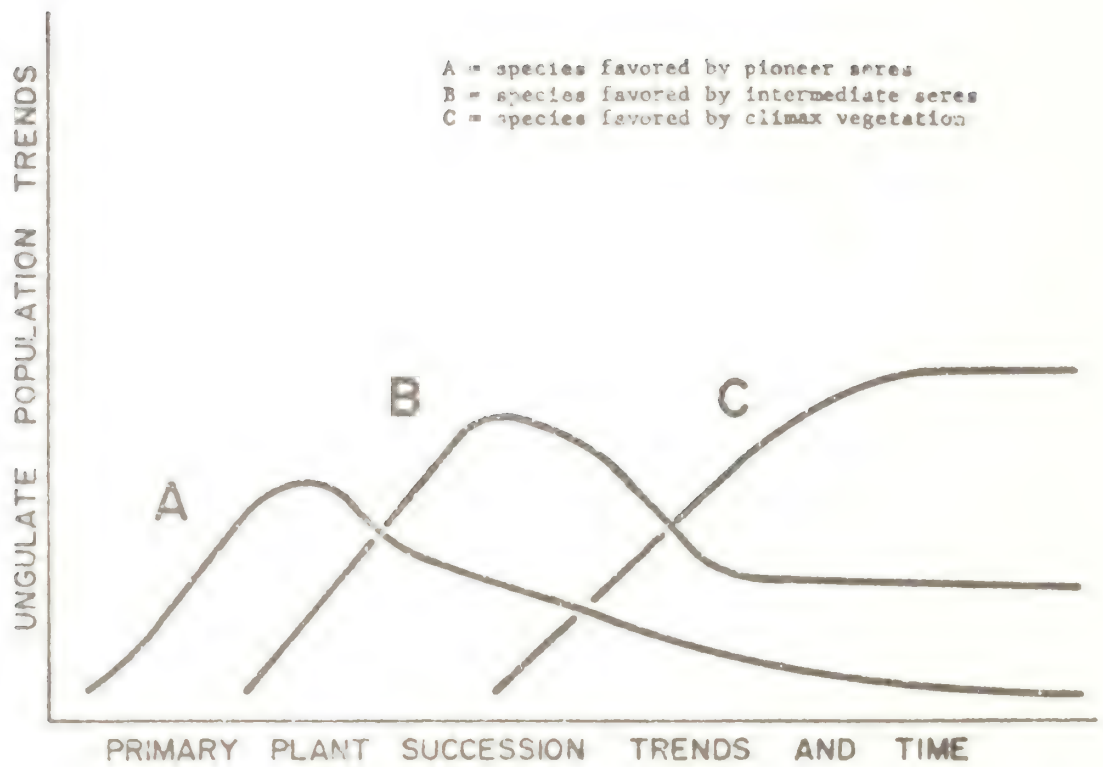


Fig. 2--Biological succession from primary plant succession and accompanying interspecific competition.

By excluding considerations of long term regulation, it appears possible to develop a testable hypothesis of what regulates populations on a year-to-year basis. A model for an elk population fluctuating in relation to K illustrates hypothesized relationships (Fig. 3). Here Darwin's principle that competition is greatest between members of the same species is employed. K for sexually mature males is available mates; for other population members, some inseparable combination of space and food. Competition among male elk for females results in the most dominant older males not having sufficient energy reserves to survive over winter.

In the model, decreases in N are caused by density-influenced intraspecific competition for K which increases age- or social rank-specific deaths and emigrations and/or decreases births to the extent that r becomes negative. Intraspecific competition can also select against less adapted genotypes. N remains unchanged or increases with levels of intraspecific competition that allow births to equal or exceed deaths and emigrations.

The causes of changes in N have thus far been the intrinsic mechanism of density-influenced competition for K . When competition is occurring among population members for K , extrinsic influences from native predators, scavengers, and parasites as interacting units or from severe weather mainly hasten deaths (within or by years) and

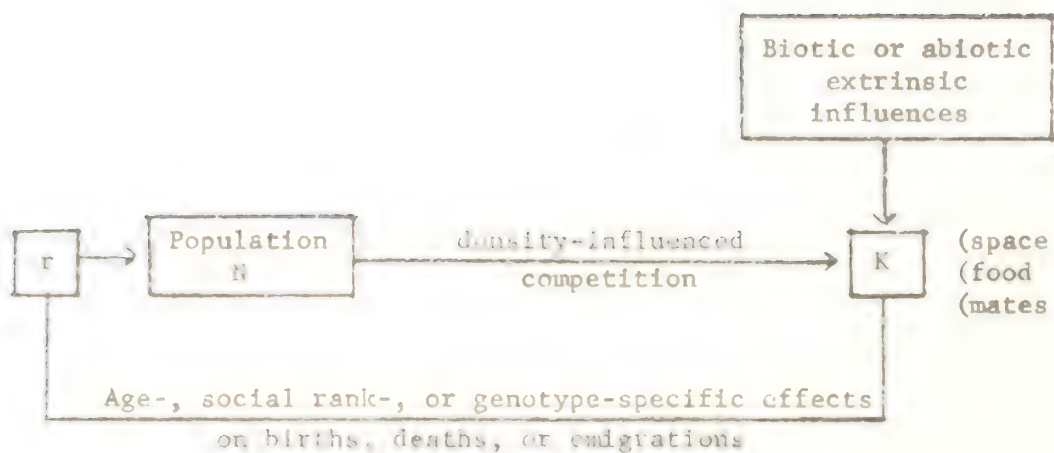


Fig. 3--Model of population regulation from the effects of density-influenced competition for K and extrinsic influences.

thereby reduce such competition. Other extrinsic influences from variable weather, fire, or intraspecific competition may either increase or decrease K , when it is space or food, and can thereby intensify or lessen intraspecific competition. Immigrations from adjacent populations or invasions of new competitors could intensify such competition. Invasions of new predators can result in K becoming some level of habitat security against predation. My point in all this is that on a year-to-year basis extrinsic influences that either increase, decrease, or change K affect the density-influenced process of competition for K .

So far I have not used the terms "density-dependent" and "density-independent." These are usually used to designate whether an influence on N is or is not a function of population density. A problem with using the density-independent term is that even though the occurrence and intensity of an extrinsic influence may not be due to population density, density-influenced processes are affected.

From the preceding a working hypothesis could be that populations are regulated on a year-to-year basis by the effects of their density-influenced competition for K , and by extrinsic influences that either increase or decrease their competition for K , or change K (e.g., from space or food to thresholds of habitat security).

This hypothesis is consistent with the logistic equation where dN/dt are functions of the effects of the relationship of N to K on r . It also seems consistent with the evidence that extrinsic influences additionally affect K , and that intraspecific competition--as reflected by agonistic behavior, dispersals, or by differential mortality or reproductive success of social subordinates--increases with crowding or environmental stress. Laboratory and field studies have rather firmly established that dN/dt are functions of population density. If "density" is more specifically identified as the process of density-influenced competition, then the hypothesis is also consistent with much of the literature on population regulation. It mainly differs from other hypotheses that populations are regulated by the effects of social interactions, genetic feedback, food deficiencies, or environmental influence by specifically identifying density-influenced competition for K as the process by or through which these become regulatory. In my field research I will be looking for data that is either consistent or inconsistent with the hypothesis, with the latter the basis for rejection or modifications. I would also encourage critical evaluations by others.

Some Applications to Management

Some applications of the reference knowledge on population regulation to wildlife management in national parks have been covered in another paper (Cole 1971) and will not be repeated here. In that

paper I also imply that a rationale for hunting wildlife populations at or near K is that hunting can substitute for the mortality that would otherwise occur from their density-influenced competition for K . Such exploitation could also maintain birth rates and/or the survival rates of young at higher levels than they would otherwise be. The mortality from hunting would not substitute for that which was not entirely due to population density, e.g., escapements to physiological old age (includes "spent" males), accidents, severe weather stresses, or be exactly comparable to the highly age- or social rank-specific mortality from natural causes.

A rationale that hunting will substitute for mortality due to population density should not, of course, be applied without other considerations. Some of these relate to small, relict populations that may not be able to compensate for human exploitation. Here considerations of minimum population size, adaptive social relationships (culturally-transmitted or anti-predator behavior), and genetic drift may be important. It may also be important to recognize that in some situations human exploitation of herbivores could reduce K for carnivorous species, or by "conditioning" (avoidance behavior) preclude a population from using space or food that it would otherwise use.

Other justifications exist for hunting and those to reduce conflicts with agriculture can be real or thought to be real.

Another argument used in justification applied to native ungulates is that hunting is necessary to prevent them from progressively destroying their own K, which is generally defined as food or habitat. This concept apparently assumes that native predators previously held herbivores below K, which now only seems to occur in marginal or low-security level habitats, or that species which have persisted over thousands of years have the capacity to destroy forage sources that determine their own density. The latter is inconsistent with the biological axiom that consistently harmful relationships do not survive the natural selection process.

At best we have determined, the predominantly North American concept that native ungulates destroy their own K is based on extrapolations from situations where domestic stock or wildlife occurred at artificially high densities due to supplemental feeding or restrictions on dispersals, on arbitrary designations of minor sources of food as K, on interpretations that plant succession toward climax is "deterioration" and due to biotic effects alone, and finally, the "textbook example" of the Kaibab deer (Baumhagen 1941) and introduced reindeer (*Rangifer tarandus*) on the St. George, St. Paul (Scheffer 1951) and St. Matthew islands (Klein 1968). For alternative interpretations of the Kaibab, read Caughley (1970) and subsequent comments by Mark (1973). The equilibria or extinction results from reindeer introductions are not inconsistent with what could be predicted when species colonize new environments or unsuitable habitats, and are hardly applicable to long established populations.

In closing, I would propose that the concept that free-ranging native ungulates can progressively reduce their own K by their foraging alone not be used as a rationale for hunting or for population control within North American national parks. This does not say that plant composition, density, vigor, and rates of succession will not be different on some sites because ungulates are present--only that these conditions cannot always be interpreted as evidence of a progressively declining K. Where native ungulates reduce their own K because they were artificially concentrated or restricted from freeranging, or affect rates of primary plant succession, statements about such situations should be so qualified. It may also be important to recognize that the biotic effects of ungulates on seral vegetation do not always decrease their food sources. Effects that retard succession from herbaceous to forest vegetation can prevent reductions of their food. Foraging that hastens succession from woody to herbaceous vegetation can either decrease or increase food for a particular species.

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YELLOWSTONE'S BISON

a unique wild heritage

The only remaining wild bison in the United States
are threatened
by a questionable brucellosis eradication program

by MARY MEAGHER

THE YELLOWSTONE BISON—their history of exploitation, protection, and management—epitomize the evolution of much of our present thinking about wildlife and natural areas. When the area we now know as Yellowstone National Park was set aside “for the benefit and enjoyment of the people” in 1872, little thought was given to the wildlife found so abundantly within the region. The wonders of the Yellowstone—spectacular geysers, colorful hot pools, the Grand Canyon of the Yellowstone—motivated those who promoted the idea of a national park. Wildlife protection consisted only of a provision against “wanton destruction.”

Wanton destruction—by whose definition? Hunting for camp meat was permissible and gentlemen hunters came specifically for sport shooting. The early hide and meat hunters, killing for profit, took a tremendous toll of some wildlife species. Although regulations that prohibited hunting were passed in 1883, real protection for wildlife did not begin until 1894, when the Lacey Act was passed to provide both effective penalties and jurisdictional authority for killing wildlife in the national park.

The Yellowstone bison provided the impetus for passage of the Lacey Act. More than any other “game” species, they had been hunted mercilessly within the park. As wild bison elsewhere throughout the West were systematically exterminated, ever higher prices paid for heads provided great incentive for poachers to run the risk of small penalties for killing bison in Yellowstone. The capture of Ed Howell in the act of killing some of the few remaining Yellowstone bison in March of 1894 so aroused public indignation that the Lacey Act became law. This act was a major safeguard, but the monetary rewards for poaching bison were still so attractive that protection was not finally assured until coupled with adequate laws in all three surrounding states—in about 1901. Thereafter, the small band of bison that had survived in the remoteness of the Pelican

country began to increase. Today, Yellowstone is the only place in the United States where a wild bison population has persisted since European man first arrived on this continent.

The original bison inhabitants of the Yellowstone were mountain bison that had already disappeared from much of their range by 1840. Skulls and portions of crania suggest that this form may be distinct from the plains bison, but the quantity of available material may be insufficient to settle the question. Historical accounts do generally agree that, compared to the plains bison, these mountain animals were more hardy, fleet, and wary, with darker, finer, more curly hair. Sex and age differences among animals sighted may account for differing reports of size. The mountain bison migrated seasonally along altitudinal gradients. Small bands were characteristic in contrast to the large herds that inhabited the plains.

By the time the Yellowstone bison were effectively protected by laws, wild bison had been eliminated from the historic wintering areas of the Lamar in the northeast part of the park and from the centrally located Mary Mountain area (Hayden Valley–Firehole). To the park administrators of the time, extinction of the remnant population still existing east of the Yellowstone River seemed quite possible. In 1902 they arranged for plains bison from two semidomesticated herds to be introduced to the park at Mammoth. In 1907 this fenced herd was moved to what became the “Buffalo Ranch” in the Lamar Valley. During the next several decades the semidomesticated herd prospered, subject to herding, artificial feeding, castration, and other usual ranching practices. Throughout the same period, the original wild herd persisted and slowly increased to intermingle and interbreed with introduced plains bison beginning in the 1920s. Today the bison of the park can be considered one population genetically.

In 1936 bison were trucked from the Lamar to the Mary Mountain area to reestablish a population on

WINTER IS THE CRUELLEST TIME

Some winter deaths in the range limiting factor on the Pelican Valley bison herd. Only about a hundred animals survive the harshest winters. In deep snow bison use their heads as shovels to dig for food, only a few can utilize a ridge line where the wind has blown the feed clear of snow. Other factors than weather regulate bison numbers in other seasons. Yellowstone bison winters are less severe than in the Grand Teton—more varied than in Pelican Valley.



Yellowstone National Park. Wintering range of bison. The rest of the park is shown in light.



that historic range. Today distribution is known within the park closely resembles the historic distribution, to the extent that we can make comparisons. Wintering populations center in the Lamar and Pelican Valleys and the Mary Mountains. In summer the populations range widely within the park, the distribution occurs within a broad strip extending roughly from northeast to southwest, while the northwest and southeast corners are not in the habitually used bison range at some time during the year.

ABOUT 1930 the philosophy of bison management began to change. The buffalo ranching operation in the Lamar Valley was gradually phased out concurrent with the development of a policy for the administration of natural areas. The last vestiges of buffalo ranching terminated with a token winter reduction of bison at Lamar in 1931. Ranching had been practiced with bison elsewhere in the park.

In keeping with a range-livestock viewpoint, management was to be limited to the regulation of population numbers (reductions) where winter range conditions seemed to indicate a need. Group numbers in Lamar had been regulated by man as part of the ranching operation, when artificially high numbers were maintained. Regulation of other population segments began in 1955 when the Mary Mountain population numbers greatly increased. This increase was probably related to the reestablishment of bison

on a long vacant but suitable winter range; if so, a comparable increase should not again occur.) Reductions were held at irregular intervals on all population segments between 1963 and 1966.

Research that began in 1963 provided the basis for a reevaluation of the need for bison population control by man's intervention. The Pelican segment had been subject to only two small reductions since near extermination at about the turn of the century. Movements of the bison were unrestricted by any but natural influences such as snow depth. Establishment and use of a national park by man did not particularly influence their habitat. Inasmuch as bison had apparently inhabited the Pelican area for centuries before establishment of the park, their ability to persist without man's help seemed likely.

We do not yet fully understand the mechanisms involved in natural regulation of the three bison population segments, but the available information does not suggest a need for future reductions. Comparatively low reproduction rates, low increment rates, and heavy mortality during exceptionally severe winters are the major influences on population size among the park bison. A combination of intrinsic and extrinsic factors seems to be involved. The three population units of bison show three different recent short-term population trends: Pelican valley, decrease; Mary Mountain, increase; and Lamar Valley, near stability. This difference suggests that the natu-



WYOMING



WYOMING



Census information and limited marked-animal data also indicate that use of a given wintering valley is habitual.

Habitual use of particular areas in both summer and winter explains the lack of emigration of population groups from the park. No boundary fences exist around Yellowstone's 3,472 square miles, but bison do not leave the park except for scattered individuals, nearly all of which are bulls. Past records show mixed herd groups (bulls, cows, calves) occasionally leaving near Gardiner, Montana, during a severe winter, but this exodus has happened only when artificially high numbers were maintained in the Lamar Valley by winter feeding. Historically some population groups that summered inside the park regularly wintered outside, but these bison groups are long gone. These winter ranges outside the park are no longer available, which precludes reestablishment of groups that habitually move outside the park boundaries.

Likewise, predation and disease have no apparent role in the regulation of bison numbers. Predation is a rare occurrence, even a weakened bison is a formidable antagonist, and calves are usually well protected in the herd units. Parasite and disease organisms are few in kind and negligible in effect.

Bison management in Yellowstone National Park now may be termed "no management," with its goal of maintaining this truly wild, free-ranging population subject only to the influences of natural regulatory processes. This objective is unique in the United States. Most other populations of bison are fenced; many are domesticated to some degree. Numbers are controlled by hunting or cropping. But the bison "no management" objective for Yellowstone has been seriously challenged recently.

BRUCellosis (Bang's disease, undulant fever) was first tested for and reported in the Yellowstone bison in 1917. Rate of infection has varied considerably among tests made in different years, and also among the wintering populations of a given year. In 1964-65, 129 animals tested in Lamar showed a rate of 59 percent, 33 tested in Pelican showed a rate of 42 percent, and 302 tested at Nez Perce Creek showed a rate of 28 percent.

Brucellosis is caused by an organism called *Brucella abortus*. Whether *Brucella abortus* was introduced or is endemic is not known; the organism may well be native to wild bovids. Possibly brucellosis arrived on this continent with the bison when they crossed the Bering land bridge during the Pleistocene.

Evidence suggests that brucellosis has little effect on reproduction rates in the Yellowstone bison. Limited data indicate that pregnancies are normal. Rates of pregnancy have not correlated with the incidence of the organism. Abortion "storms" caused by brucellosis as seen in cattle do not occur. Dr. Erling Quortrup (a veterinarian who tested bison here in 1944) believed that brucellosis had probably existed in the Yellowstone bison for a long time and that the bison had acquired a natural immunity. Further studies may indicate that mutual adaptation exists

between the bison and the disease. Long lived animals may develop immunity to the disease.

As the disease has become a major problem, federal, state, and local health organizations and brucellosis eradication committees of the U.S. Department of Agriculture have focused increasing attention on brucellosis in the Yellowstone bison. During 1972 and 1973 considerable controversy has resulted because the National Park Service of the Department of the Interior was refused to engage in a brucellosis program within Yellowstone National Park. Instead, personnel of Yellowstone National Park have developed an eradication program—essentially one of complete eradication of the disease from the bison.

The brucellosis eradication program proposed to the National Park Service would entail trapping all possible bison, holding brucellosis-free animals in a pasture, and shipping to slaughter all animals that react positive to a test for brucellosis. If bison that could not be trapped would be shot in the field before the herd in the park are wintered, the proposal is proposed on the premise that trapping effort would be conducted on all three of the main bison wintering areas. Proponents of this proposal thus believe that at least 70 percent of the total population could be trapped. Past brucellosis test records suggest that perhaps 30 to 40 percent of the population could be reactors shipped to slaughter; total loss (reactors and field shooting) would be 30 to 40 percent of the population.

This proposal fails to recognize that wilderness designation precludes use of trapping operations, together with construction of facilities for handling and pasturing bison on two of the three wintering areas (Pelican and Mary Mountain). Actual numbers of bison that would thus be destroyed are at least 80 percent of the total population because of the wilderness restrictions. Bison would be exterminated from two of the three wintering areas. A fenced herd of perhaps forty or fifty bison would be left in the Lamar. During the time required to eliminate all untrapped bison—perhaps as long as ten years—these fenced animals would become just one more semidomesticated herd. Because brucellosis occurs at a low level in a wide range of other hosts (especially in the some 12,000 northern Yellowstone elk), there is no assurance that these few fenced bison would remain brucellosis-free. Total eradication of the bison to eradicate brucellosis might finally result.

An understanding of the concept of Yellowstone National Park as a natural area is crucial to an understanding of the position of the National Park Service in this controversy. Bison management objectives are to maintain a wild population under natural conditions. Any program of roundup and elimination of bison would disrupt the whole system of natural relationships (distributions and patterns of habitat use, social structure of herd groups, population, sex and age structure, and availability of a major



food source for park carrion-eaters (which include rare or endangered species such as grizzly bears, bald eagles, and wolves). Opportunity for visitors to see wild bison would be virtually eliminated for an indefinite period of time. A brucellosis eradication program is completely incompatible with the management objectives of Yellowstone National Park as a natural area.

Moreover, the ability of bison to transmit brucellosis to cattle has not been studied. In test situations (by inoculation or by close association in a fenced area) transmission will probably occur. That wild bison will transmit brucellosis to cattle seems theoretical and quite unlikely; brucellosis-free status has been achieved in areas adjoining the park in spite of the bison. The question is academic as it pertains to Yellowstone, because a reasonable and effective alternative to brucellosis eradication within the park exists.

Personnel of Yellowstone National Park have developed a program of boundary control to ensure that those few bison that do leave the park will not contact domestic livestock. Records compiled for a number of years indicate where and when such movements might occur. Bison that move beyond specified locations into areas adjacent to but within the park boundaries will be shot by park personnel and utilized for scientific specimens, if feasible. Cooperative arrangements with the surrounding states are in effect to eliminate bison that do manage to move out of the park. The Park Service anticipates that this program will result in elimination of one or two bison annually, although none has yet been shot. This program exempts bison in wilderness areas.

The boundary control program will achieve both objectives: those of the livestock interests to eradicate brucellosis in cattle for economic and public health reasons, those of the National Park Service to maintain wild bison in the habitat and under the conditions to which they are native.

Controversy over the magnitude of the effects of a brucellosis eradication program obscures the real issue. The Yellowstone bison represent unique and irreplaceable esthetic, scientific, and educational values that cannot be preserved if a brucellosis eradication program is implemented in the park. The obligation of the National Park Service to protect these values takes precedence over eradication of an organism that also may well be part of the natural community of the Yellowstone environment. ■

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Management Involving Grizzly Bears and Humans in Yellowstone National Park, 1970-73

Glen F. Cole



Management Involving Grizzly Bears and Humans in Yellowstone National Park, 1970-73

Glen F. Cole

This report evaluates the results of a management program that was carried out in Yellowstone National Park from 1970 through 1973. Program objectives were to maintain the park's grizzly bear (*Ursus arctos horribilis*) population under natural conditions and reduce bear injuries to humans.

The management procedures employed have been described in previous reports (Cole 1970, 1971a, 1971b, 1973). In summary, these involved actions to eliminate sources of unnatural food (garbage and camp groceries) that had altered bear habits and been the basic cause of most injuries from 1930-69 (Cole 1971a). Also, hiking and camping were regulated to reduce the opportunities for bear injuries to humans and certain bears were captured, transplanted, or destroyed when this was considered necessary to protect humans.

The procedures used to collect data and evaluate the results of management have also been described in the above cited reports. Evaluations mainly involved testing hypotheses that could be rejected by inconsistent data or appropriate statistical tests. These hypotheses were that the management actions to eliminate unnatural food sources and the bear control procedures applied in the 1970's will:

1. Reduce the number of grizzly injuries to humans in park developments from the 1963-69 levels (4.4 average; 2-8 range).

2. Restore a more natural grizzly population than existed in the 1960's as evidenced by scattered distributions in summer, fewer bears using developed areas, and progressive reductions in the numbers of bears being controlled and destroyed.

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3. Not prevent the grizzly population from maintaining its capacity for establishing its numbers at natural carrying capacity levels.

MANAGEMENT RESULTS

Injuries to Humans

The data in Table 1 show that grizzlies caused fewer injuries per year during the 1970's than the 1960's. The 1970-73 mean of about 0.7 injuries per year in developed areas was significantly different ($P = 0.05$) from the 1963-69 mean of 4.4 (2-8 range) per year by the sum test of Wilcoxon and Wilcox (1964). Injuries in backcountry areas did not increase despite a 300% increase in the number of backcountry campers and hikers from 1970-73. The third known fatality from a grizzly in the park's history occurred in 1972 when a man returned to an illegal camp in the dark and encountered a bear that was feeding on food and garbage that had been left on the ground.

Grizzly Distributions

From 1968-73 the number of grizzlies seen in park developments or in the wild (Table 2) varied with different

natural food and other environmental conditions. Greater numbers were observed in the wild during 1968 and 1971, when the grizzlies were dispersing for rodents or preying and scavenging on large ungulates at low elevations (Cole 1972). Summer sightings were also inflated by increased night patrols during the 1970's and other data from many other populations (Table 1) may accurately reflect the downward trends in bear use in the spring of 1973 as described in other work of mine. Initially hold grizzlies near their hibernation sites, and to subsequently allow bears to obtain food at high elevations where they were less observable. Reduction in porcupine (*Eutamias* sp.) numbers at low elevations (below 2300 m) also appeared to contribute to grizzlies using high elevation areas to a greater extent during 1973.

As presented, the yearly totals in Table 2 show the general trend from 1970-73 were toward fewer sightings of grizzlies in developed areas. Variable numbers of grizzlies were seen in the wild each year, and their spaced distributions on natural foods in summer contrasted with previous years when large numbers concentrated at garbage dumps.

TABLE 1. Number of injuries to humans from grizzly bears per year in Yellowstone National Park, 1930-73

Years	No. grizzly caused injuries per year*		No. of visitors per month
	Developments	Backcountry	
1930's	0.6 (0-3)	0	500,000
1940's	1.2 (0-7)	0	600,000
1950's	0.6 (0-2)	0	2,700,000
1960's	4.4 (2-8)	0.3 (0-2)	500,000
1970	2	1	700,000
1971	0	0	0
1972	1	1	1,000,000
1973	0		0

* Accidents and injuries are possible in areas due to grizzly bear attacks from 1968-1971. The most recent area development in 1972 was still a probable

animal samples may have been partly due to younger females only being able to raise one young to yearling age, partly due to greater numbers of these females producing cubs than previously, and finally, some females with one cub not being observed until their young reached yearling age.

Population Numbers

Table 6 shows the different population sizes that could occur with different numbers of females with young, a mean 3 year reproductive cycle for adult females, a known adult male to female ratio, and mortality and emigrations that were equal to the yearly production of cubs.

The 1973 sightings of 15 different females with 27 cubs and 16 different females with 24 yearlings (Table 5), with track records (Knight unpublished) that indicated that at least four other females with cubs or yearlings were present, suggested that Column II in Table 6 provided the best estimate of the park grizzly population. The calculated 250-290 population size is surprisingly close to earlier published estimates that were obtained by different methods (Cole 1971a, 1973).

Two of the 15 females with cubs shown in Table 5 were outside Yellowstone Park, but these were in such close proximity (within 1.6 km) as to suggest their home ranges overlapped park boundaries. If five additional females (three observed in 1973) with cubs and proportionate numbers of other classes occurred in the 5,200 km² area bordering Yellowstone, the combined park and outside area population could approximate 320-360 animals, as shown in Column III in Table 6. Craighead and Craighead (1971) estimated a minimum population of 175 for the park and adjacent 5,200 km² area, but this estimate was mainly an average from yearly counts of bears that used garbage dumps.

Population Trends

General trends in population numbers since 1970 were inferred from the differences between the known yearly removals (Table 4) and the mortality and emigrations (36 individuals) that would maintain a population of 250-290 grizzlies (Table 6).

Because proportionally greater numbers of adult males were removed than of either adult females or younger bears, rates of population increase could have

TABLE 4. Numbers of giraffes removed by park and anti-poaching programs, and attributed to deaths of marked and unmarked by age in different states, 1976-1996

	Removal due to control programs		Killed by vehicles	Other known kills ^a		
	Parks	Mont.		Walls	Streets	Totals
1970	20	0	0	811.1	344.1	1155.2
1971	6	14	1	6	26.3	37.4
1972	24	2	1	0	0	27
1973	0	0	0	811.1	0	811.1
Total	35	17	2	24	12	69

¹ Total deaths from hunting of 4,300 in 1911; estimated 200 imports, with dense, wooded grassland. Yellowstone Park prior to 1900 (1900) of 100,000 deer.

7. Include 9 animals detected to contain 1 tumour and 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 83

4 include 1 (international) and 1 (national) developing countries, identified with well developed areas.

TABLE 5. Numbers and ratios of female grizzlies and young seen in different family groups in Yellowstone Park during a 1959-66 period* and subsequent years†

Years	Numbers			Numbers		
	Females	Cubs	Ratios	Females	Yearlings	Ratios
1959-66 average	15	33	2.2	15	20	1.3
1972	11(31)	22(58)	2.0	9(25)	13(34)	2.0
1973	15(33)	27(64)	1.8	16(40)	24(60)	1.5

^a Average female-cub figure from Craighead and Craighead (1967) with female mortality figure calculated from a reported 33% mortality rate on a population composed of 200 adult females and 400 pups.

Figures in parentheses are the total sightings of female *C. caryacus* from which different family groups were distinguished. The 1973 data include two females with cubs and two yearlings that were 1.6 km or less inside park boundaries. Four other family groups that were seen in areas 4 to 8 km from park boundaries are not included.

TABLE 6. Estimated grizzly bear population sizes based on the different input parameters used with young (Columns I, II, and III), a mean 7-year reproductive cycle for adult females (Column IV), male:female ratios, and final adjustments for equilibrium mortality and emigrations.

Classes	Nos. in classes		
	Column I	II	III
Adult females w/cubs	15	20	25
Adult females w/yearlings	15	20	25
Other adult females	15	20	25
Adult males*	18	50	64
Cubs	27	71	45
Yearlings	27	6	18
2-year-olds	27	36	48
3-year-olds	27	7	18
4 year-olds	27	36	48
Potential N	218	290	644
Mortality and emigration ‡	27	81	45
Minimum N	191	254	319
Approximate N	200	270	340

* Calculated as 0.85 of adult females (Craighead and Craighead 1967).

+ Observed 1973 ratio of 1.8 per female used from Table 5 and carried through to constant classes to give a potential N that is adjusted by subtracting equilibrium mortality and emigrations.

‡ Equal to yearly production of cube

been slightly higher than those shown in Column II of this table. Emigrations of young adults from the park were probably reduced as a result of lowered adult densities.

The differences between the known yearly removals from the park population and the 36 that would have to die

or emigrate in order to maintain stable population numbers were a plus 11 animals in 1970 and in 1971, 24 in 1972, and 33 in 1973. If additional deaths from natural or other causes were equal to one-quarter to one-half of the yearly increments of young (9-18 bears) population number were either

